

2.46

109

$20 \frac{12}{20}$

610

74 E

THE

# Surgical Instruments of the Hindus

THE  
**SURGICAL INSTRUMENTS  
OF THE HINDUS**

WITH

**A Comparative Study of the Surgical Instruments of  
the Greek, Roman, Arab and the Modern  
European Surgeons**

BY

**GIRINDRANĀTH MUKHOPĀDHYĀYA, B.A., M.D.**

*Fellow of the Calcutta University, Meland Gold Medalist in Surgery, Formerly  
Lecturer on Surgery, Calcutta Medical School and College of Physicians  
and Surgeons (Bengal), Member of the Asiatic Society of Bengal,  
Life Member and Professor of Botany, Indian Association  
for the Cultivation of Science, Examiner,  
Calcutta University*

**Griffith Prize Essay for 1909**

**In Two Volumes**

**Vol. II**

*396 Illustrations in 82 Plates*

**Published by the Calcutta University**

PRINTED BY ATULCHANDRA BHATTACHARYYA  
AT THE  
CALCUTTA UNIVERSITY PRESS  
*Senate House, Calcutta.*

## PREFACE

---

Much trouble has been taken with our illustrations, but the author is fully conscious of their many defects. I am greatly indebted to several authors mentioned in the legends to the plates as the readers will find certain of their illustrations copied in this volume. It was found necessary in a comparative study of the surgical instruments used by the different nations of the world. It has been my wish to render due credit to all persons for the illustrations by which they may severally have contributed to the advancement of our knowledge of the subject, and I have never assumed to myself drawings, which belong to others. For those illustrations, not otherwise acknowledged, the author is solely responsible.

For his skill and patience in drawing and printing these figures I am glad to take this opportunity of thanking Mr. K. V. Seyne.

The author deems it a pleasant duty to express his thanks to the University of Calcutta for the liberality displayed in the matter of illustrations.

80, RUSSA ROAD NORTH, } G N MUKHOPĀDHYĀYA,  
*Calcutta, February, 1914*

177

178

179

180

181

182

183

## ABBREVIATIONS

Adams :	The Genuine Works of Hippocrates Translated by Francis Adams, LL.D. in two volumes (Sydenham Society).
A. H.	Catalogue of Surgical Instruments and Appliances Allen and Hanburys Ltd. 1903
A. S. :	Catalogue of Surgical Instruments and Appliances. Arnold and Sons. 1895.
Anderson	See Wellcome.
B. B. :	Surgical Instruments and Appliances. Bugeyne, Burdges & Co.
C. C. G. :	Collection de Chirurgiens Grecs. Bibliothèque Nationale. Paris
Erichsen.	The Science and Art of Surgery. By Sir John Eric Erichsen Bt., F.R.S., LL.D. Tenth Edition. 1895
Esmarch :	The Surgeon's Handbook of the Treatment of Wounded in War. By Dr. Friedrich Esmarch.
Heath :	Minor Surgery and Bandaging By C. Heath, F.R.C.S. Second Edition
I. M. G.	Indian Medical Gazette, 1904.
K. S. :	Catalogue of Surgical Instruments. Kny-Scheerer & Co.
Milne.	Surgical Instruments in Greek and Roman Times. By T. S. Milne, M.A., M.D., 1907.
Porter :	The Surgeon's Pocket-Book. The Best Treatment of Wounded in War. By Surgeon-Major T. H. Porter 1891.
Princep	Prinsep & Thomas Indian Antiquities

- Swain .                      Surgical Emergencies. By W. P. Swain,  
F.R.C.S. Third Edition. 1880.
- Thakore Sahib . History of Aryan Medical Science By H. H.  
Sir Bhagvat Singh Jee, K.C.I.E., M.D.,  
D.C.L., LL.D., F.R.C.P.E. Thakore Sahib  
of Gondal 1896.
- Waggett .                      Diseases of the Nose. By E. B. Waggett,  
M.A., M.B., B.C. 1907
- Wellcome                      Third Report of the Wellcome Research  
Laboratories at the Gordon Memorial College,  
Khartoum.
- White .                      The Veterinary Art. By James White. 1851.
-

# CORRECTIONS

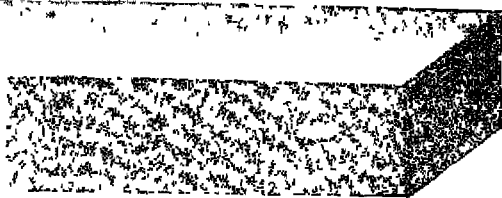
Page	37	Plate	XIX	Fig	5	Read	Samipatra	for	Amipatra
"	88	"	XIV	"	2		3	"	2
"	88	"	XIV	"	3	"	2	"	4
	103	"	LII	"	200		4	"	200
"	108	"	LIV	"	5	"	6	"	5
"	108	"	LIV	"	6	"	5	"	6
	157	"	LXXX	"	5	"	5	before	-



# PLATE I

FIGURE.	PAGE
1.—Sila or Whetstone	80
2.—Instrument box	80
3.—Instrument box of the Greeks Milne Plate IV.	80
4.—Instrument box (modern) A II Fig 223	80

# gical Instruments of the Hindus.



1



2

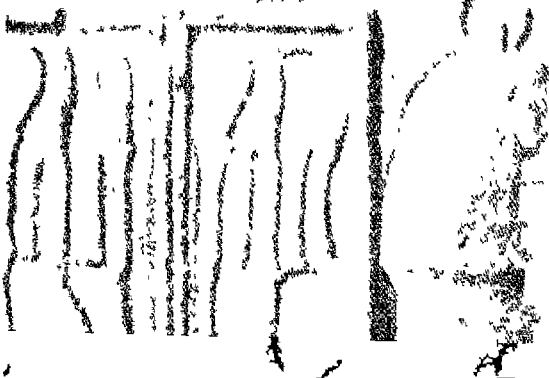
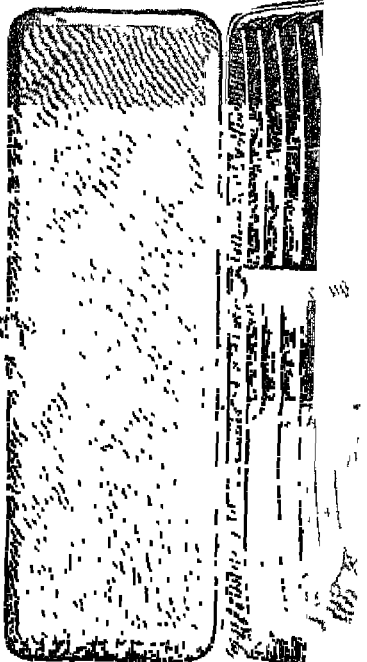
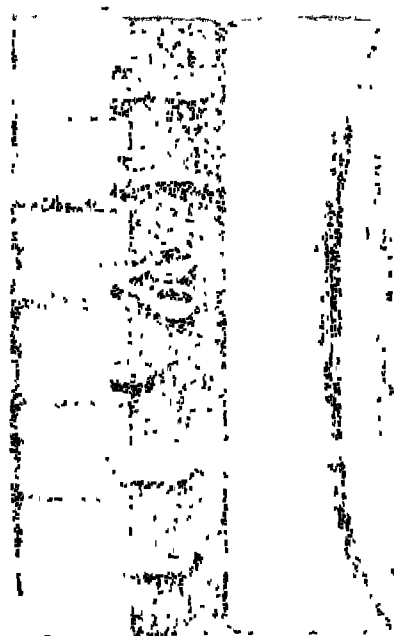


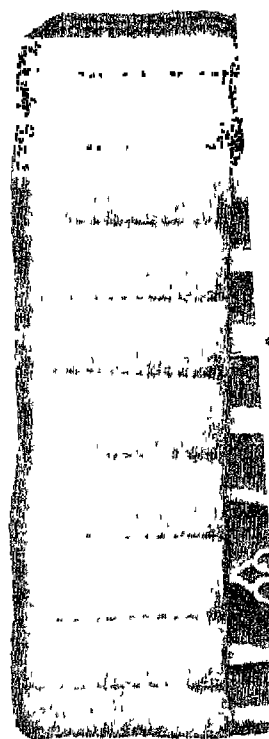
PLATE II.

FIGURE	PAGE
1.—Śastrakośa or Instrument case of leather	80
2 —Śastrakośa as used by the barbers of India in the present time	80
3 —Modern Instrument case, A. II. Fig. 568.	80

# Surgical Instruments of the Hindus.



1



2

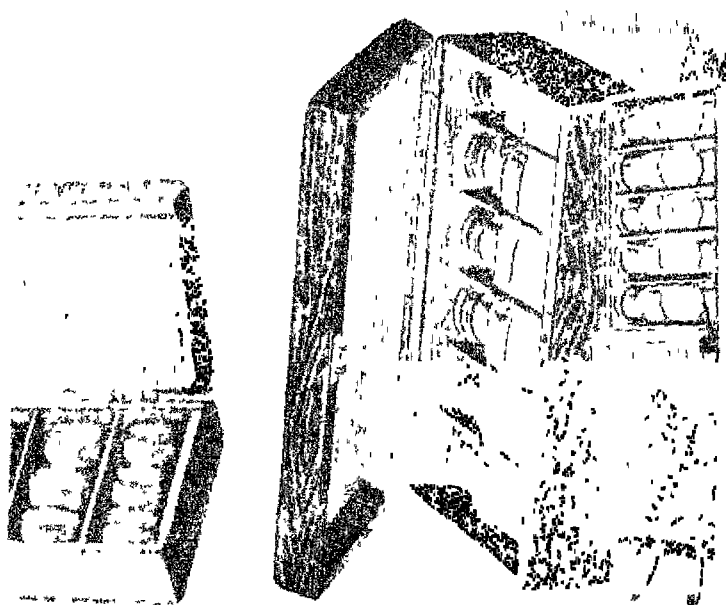


# THE SURGICAL INSTRUMENTS OF THE HINDUS.

## PLATE III.

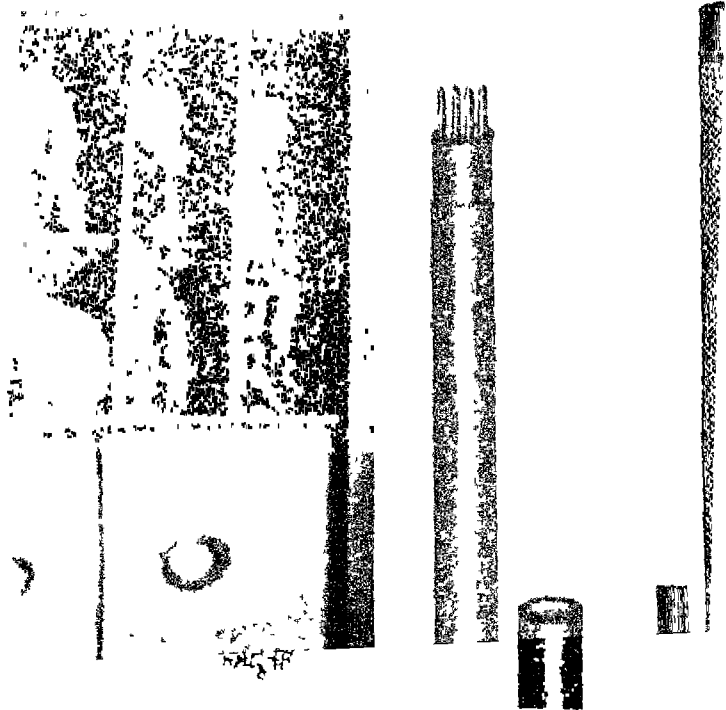
FIGURE	PAGE.
1.—Box for Ointment pots . . . . .	82
2.—Box for Medicine (Modern) A. II. Fig. 9740 . . . . .	82
3.—Medicine Box, Greek—Milne, Pl. LIV . . . . .	83
4.—Ointment Sticks in case . . . . .	83
5.—A case for probes (Modern) A. II. Fig. 1715 . . . . .	83

# Surgical Instruments of the Hindus



1

2



# THE SURGICAL INSTRUMENTS OF THE HINDUS

## PLATE IV

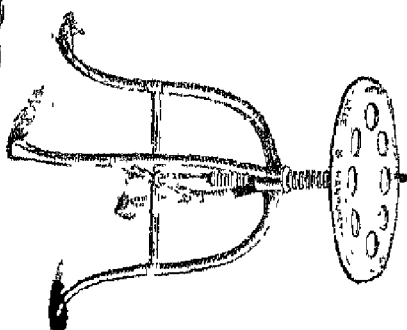
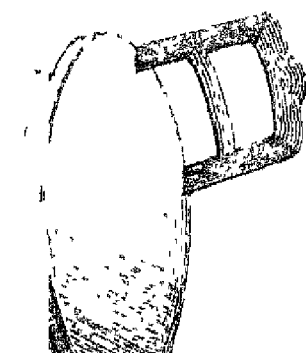
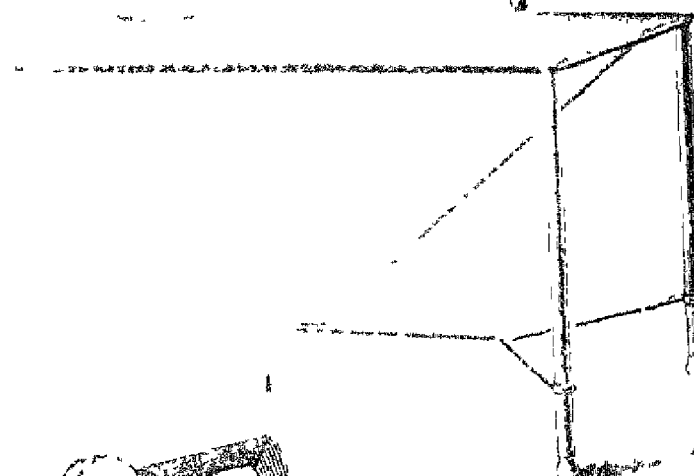
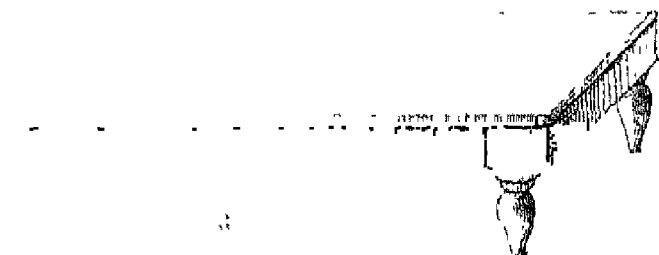
FIGURE

PAGE

1. —Bag with shoulder strap containing the  
Medicine boxes and Instrument cases 83
2. —Bag with Instruments (Modern) A. II Fig. 84
3. —Operation Table „ 86
4. —Operation Table (Modern) A. II Fig. 86
5. — *Jānumātrāsana* or Operation stool 86
6. —Operation stool (modern). A. II Fig. 90 86



2





## PLATE V.

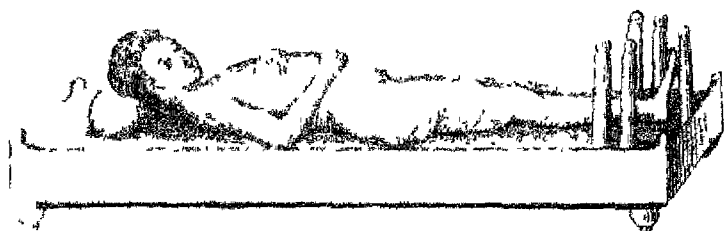
### KAPATA-ŚAYANA OR FRACTURE-BED OF THE HINDU.

FIGURE

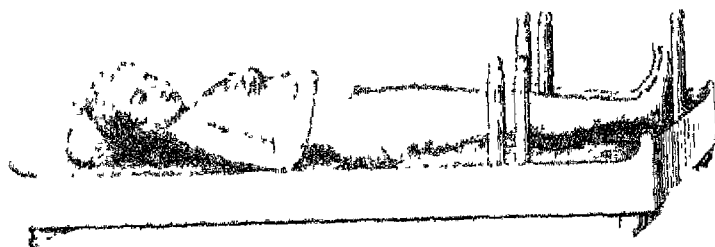
PAGE.

- 1 --Kapata Śayana for fracture of the bone of the leg, 5 pegs: 2 on each side of the ankle, one supports the foot . . . . . 85
- 2 --Kapata Śayana for fracture of the thigh bone, 5 pegs: 2 on each side of the knee joint, one under the foot . . . . . 86
- 3 -- Kapāṭa-Śayana for fracture of the thigh bone or dislocation of the hip joint, 5 pegs: 2 on each side of the hip joint one under the foot . . . . . 87

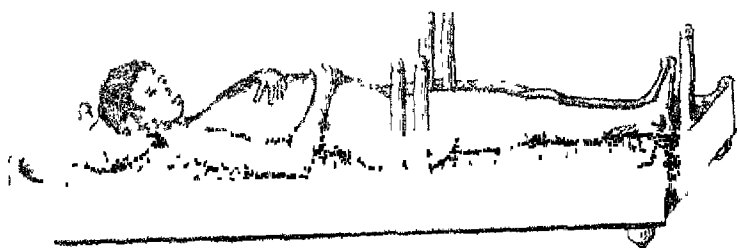
115



1



2



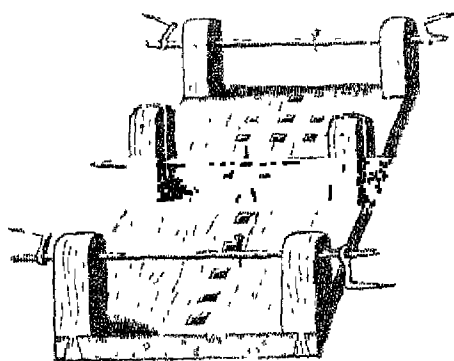
3

PLATE VII.

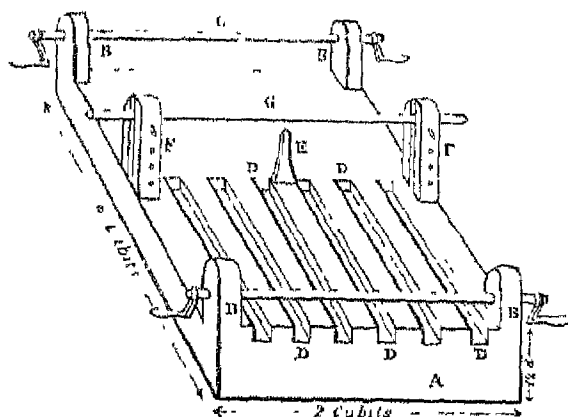
FIGURE,	PAGE
1.—The Scammum Hippocraticis or Bench of Hippocrates, as represented by Andreas a Cruce ( <i>Officina Chirurgica venetis</i> , 1596)	88
2.—The same as represented by M. Lattreé	88
A. A board, 6 cubits long, 2 broad and 1½ inches thick; not 13 as incorrectly stated by M. Lattreé	
B. The feet of the Axles, which are short	
CC. Axle-trees	
DD. Grooves 3 inches deep, 3 broad, separated from one another by 1 inches.	
E. A small post or pillar, fastened in the middle of the machine in a quadrangular hole	
F. Pillars a foot long	
G. A cross-beam laid on the pillars FF, which can be placed at different heights by means of holes in the pillars	

# The Surgical Instruments of the Hindus.

Plate VII.



1.



2

2

PLATE VIII

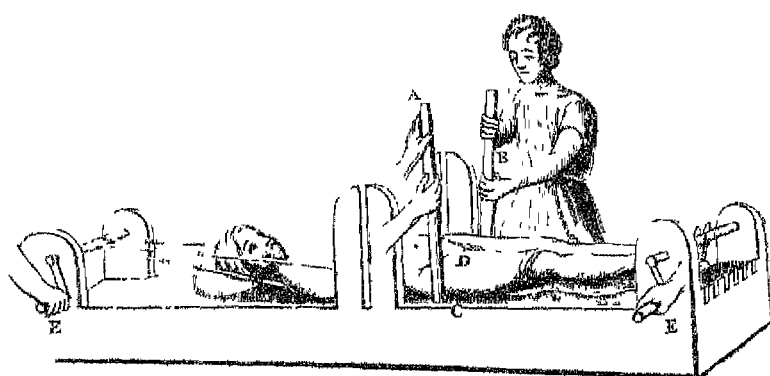
FIGURE	PAGE
1.—Representation of the mode of reducing dislocation of the thigh outwards, as given by M. Littré ( <i>Œuv. d'Hipp.</i> , tom. iv, p. 305)	89
<i>A mistake in the figure given by M. Littré is here corrected</i>	
A A lever applied to the nates of the luxated side, and acting from without inwards, in order to bring the head of the bone into its cavity	
B Another lever, held by an assistant put into one of the grooves of the machine, and intended to act against lever A	
C Groove in which the end of the lever A takes its point of support.	
D. The luxated member.	
EE Extension and counter-extension.	

Adams, Vol. II Pl. V. Fig. 1

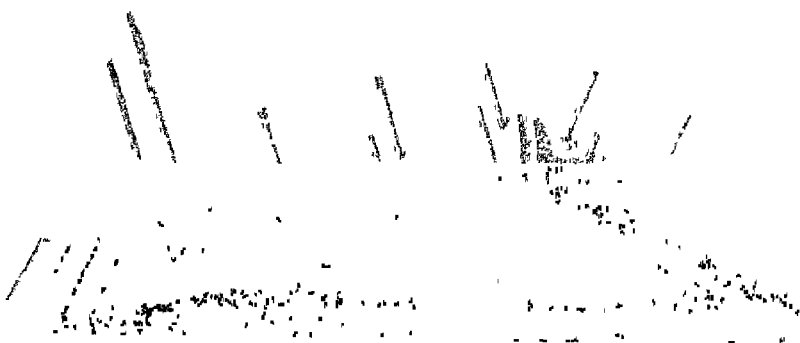
2.—The double inclined plane ( <i>Plenum inclinatum duplex</i> ) framed out of some boards and provided at the sides with wooden pegs, by which the borders of the quilled horse hair mattress, supporting the leg, are pressed against the limb, Esmaich. Fig. 20	89
--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----

# The Surgical Instruments of the Hindus.

Plate VIII



1.



2

PLATE IX.

FIGURE.

PLATE

- 1 —Banc d'Hippocrate, d'après Rufus, servant  
à réduire différentes luxations. C. C. G.  
Pl. XCV

89

# al Instruments of the Hindus.

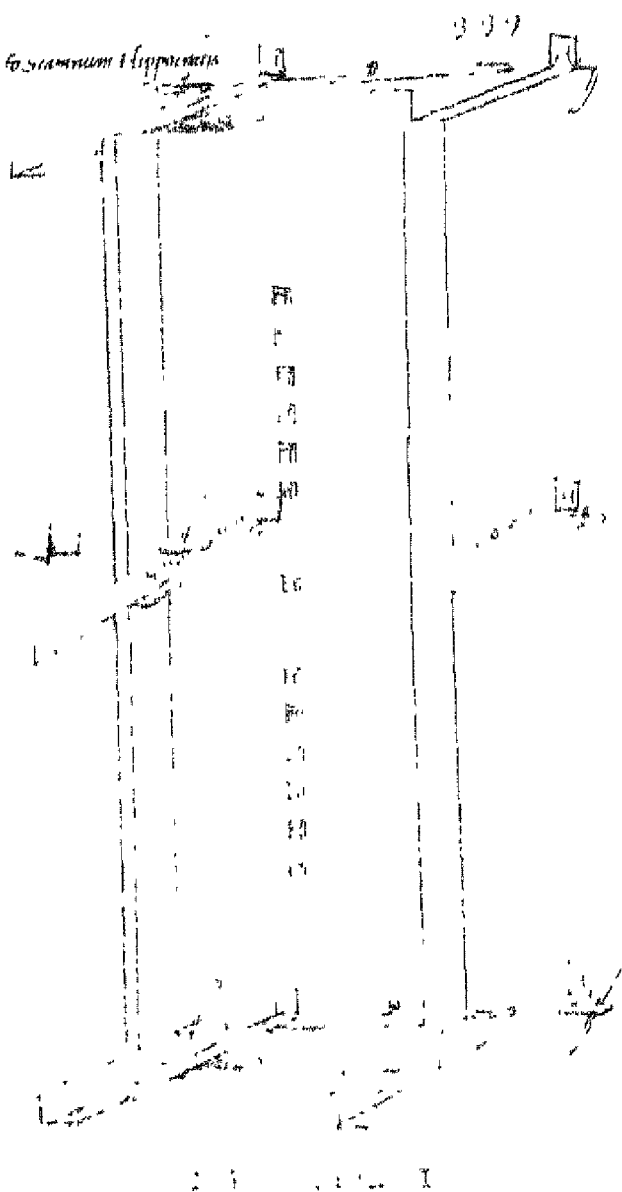




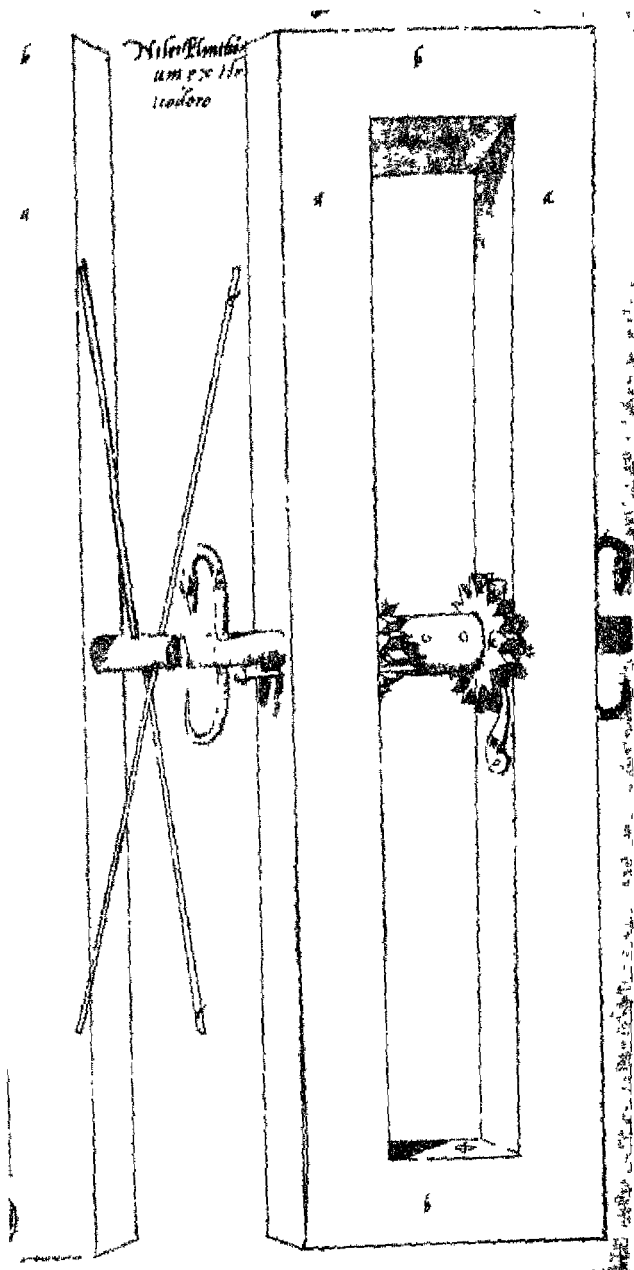
PLATE X

FIGURE

PAGE

1—Plinthum, ou cadre de Nidous, d'après  
Hérodote, C. C. G. PL. LXXIII

89



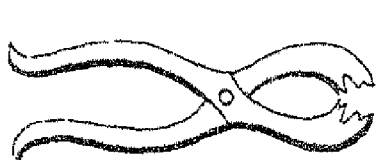
## PLATE XI

## THE SVASTIKA YANTRA OR CIRCULAR INSTRUMENTS

FIGURE	PAGE
1. - Simhamukha Svastika, or Lion forceps, after Thakore Sahib . . . . .	101
2. - Simhamukha Svastika . . . . .	101
3. - Lion forceps (Fergusson's) A. H. Fig. 1062 . . . . .	101
4. - Vyaghramukha Svastika, or Tiger forceps, after Thakore Sahib . . . . .	102
5. — Vyaghramukha Svastika . . . . .	102
6. - Vīṣamukha Svastika, or Wolf forceps, after Thakore Sahib . . . . .	102
7. - Vīṣamukha Svastika . . . . .	102
8. - Paraksumukha Svastika, or Hyena forceps, after Thakore Sahib . . . . .	102
9. — Paraksumukha Svastika . . . . .	102

# The Surgical Instruments of the Hindus

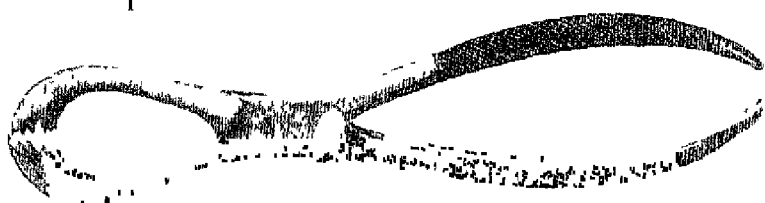
Plate XI



1



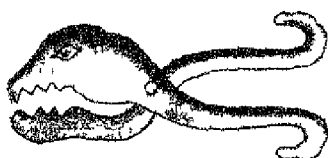
2



3



4



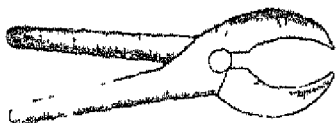
5



6



7



8



9

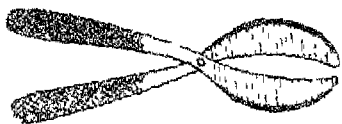
PLATE XII.

THE SVASTIKA YANTRA OR CIRCULAR INSTRUMENTS

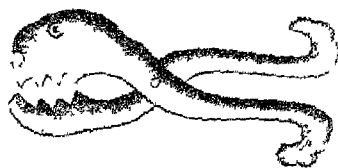
FIGURE.	PAGE.
1.—Rksamukha Svastika, or Bear forceps. After Thakore Sahib	102
2.—Rksamukha Svastika „ „ „	102
3.—Dvipinukha Svastika, or Panther forceps.	102
4.—Majjirānukha Svastika, or Cat forceps.	102
5.—Śigālanukha Svastika, or Jackal forceps.	102
6.—Airbhānukamukha Svastika, or Deer forceps.	102
7.—Makānamukha Svastika, or Crocodile forceps.	102
8.—Mathieu's Aural forceps, with crocodile mouth. A. H. Fig. 1993, „	102

# The Surgical Instruments of the Hindus

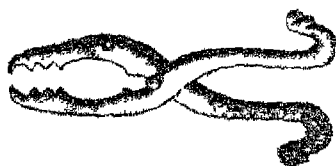
Plate XII.



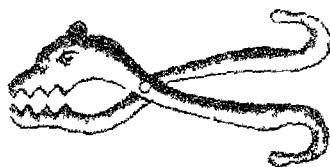
1



2



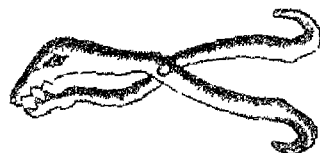
3



4



5



6



7

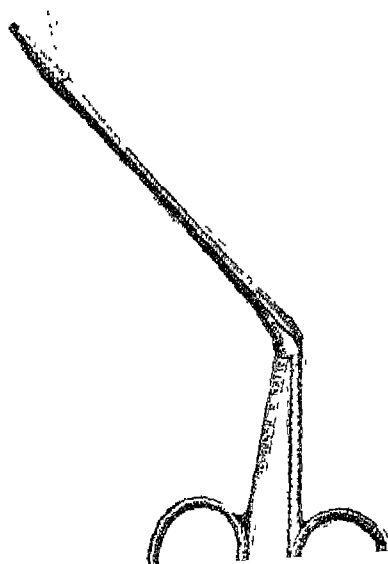


PLATE XIII.

THE SVASTIKA YANTRA OR CRUCIFORM INSTRUMENTS

FIGURE	PAGE.
1 —Kākamukha Svastika, or Crow forceps	103
2 —The same, after Thakore Sahib	103
3 —Kankamukha Svastika, or Heron forceps	103
4 —The same, after Thakore Sahib	103
5 —Kuraramukha Svastika, or Osprey forceps	103
6.—Cāsamukha Svastika, or Blue-Jay forceps	103
7.—Bāsamukha Svastika, or Eagle forceps	103
8.—Śuśughātāmukha Svastika, or Hawk forceps	103

# The Surgical Instruments of the Hindus.

Plate XIII.



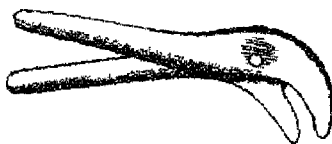
1



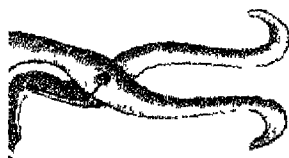
2



3



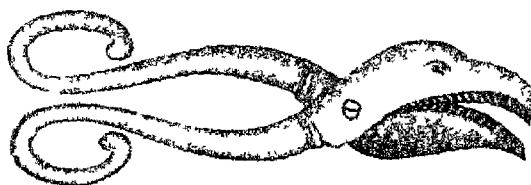
4



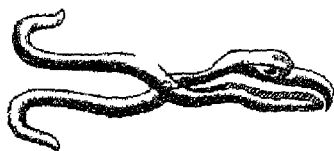
5



6



7



8



# THE SURGICAL INSTRUMENTS OF THE HINDUS

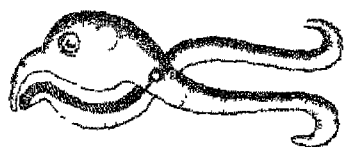
## PLATE XIV.

### THE SVASTIKA YANTRA OR CRUCIFORM INSTRUMENTS.

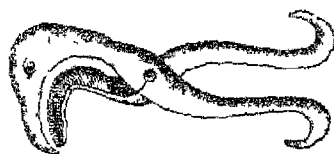
FIGURE	PAGE
1.—Ulukamukha Svastika, or Owl forceps	103
2.—Cillimukha Svastika, or Kite forceps	103
3.—Śyenamukha Svastika, or Vulture forceps, after Thakore Sahab	103
4.—Gadhramukha Svastika, or Falcon forceps	103
5.—Krauñcamukha Svastika, or Curlew forceps	103
6.—Bhīṣṇagarājamukha Svastika, or Butcher-bird forceps, after Thakore Sahab	103
7.—Greek forceps for extracting bone. Adams. Vol. I. Pl. III. Fig. 9.	103

# The Surgical Instruments of the Hindus.

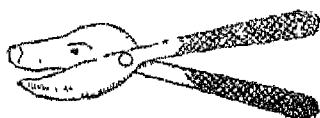
## Plate XIV



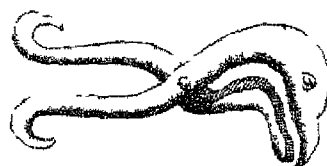
1



2



3



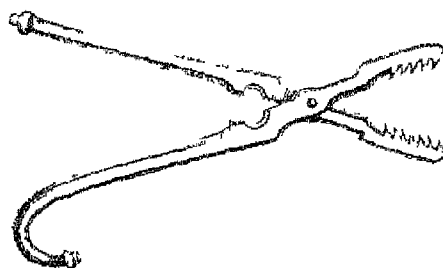
4



5



6



7

THE SURGICAL INSTRUMENTS OF THE HINDUS.

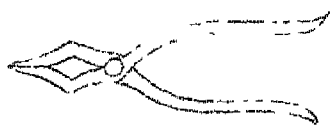
PLATE XV.

THE SANDARŚA OR PINCHER-LIKE INSTRUMENTS.

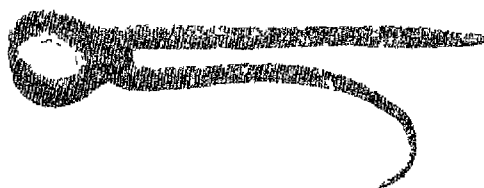
FIGURE.	PAGE
1.—Sāpāṣī or Blacksmith's forceps	100
2.—Blacksmith's tongs. Mūne, Pl. XLII. Fig. 2.	100
3.—Sandarśa Yantra, or Forceps with arms, after Thakore Saheb	101
4.—Sonnā, or Forceps without arms, Goldsmith's forceps	106
5.—Forceps with smooth ends	106
6.—Forceps with rough ends	106

# The Surgical Instruments of the Hindus.

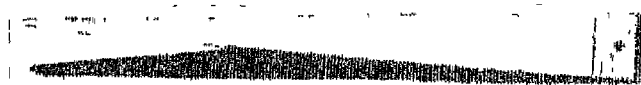
## Plate XV.



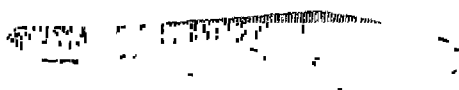
3



2



4



5



6



1

PLATE XVI.

THE SANDHĪŚĀ YANTRA OR FINGER-RING INSTRUMENTS.

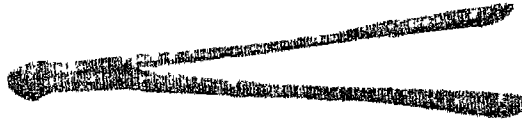
FIGURE	PAGE
1.—Epilation forceps	105
2.—Epilation forceps. Milne Pl. XXVI Fig 3	105
3.—Epilation Forceps (modern)	105
4.—Depilatory forceps (modern) A. S. Fig 9891	105
5.—Mucutī Yantra	105
6.—Mucutī Yantra, after Thakore Sahab	106
7.—Macundi ..	106
8.—The Dressing forceps, (Mason's) A. H. Fig. ..	106

# The Surgical Instruments of the Hindus

I atc XVI



1



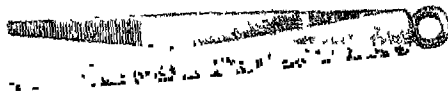
2



3



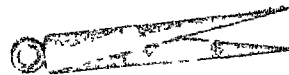
4



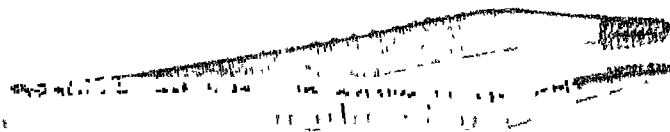
5



6



7



8

PLATE XVII

THE TĀLA YANTRA OR PICK LOCK-LIKE INSTRUMENTS.

FIGURE.	PAGE.
1.—Ekatāla Yantra . . .	107
2.—Ekatāla Yantia . . .	107
3.—Dvitāla Yantra	107
4.—Ekatāla and Dvitāla, after Thakore Sahel	107
5.—Ear Scoop (modern) .. .	107
6.—El. Malahga or Ear spoon used in Kordofan. Anderson Fig. 41. Wellcome. ...	107

# The Surgical Instruments of the Hindus.

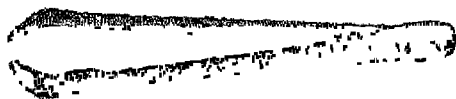
## Plate XVII



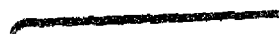
1



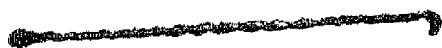
2



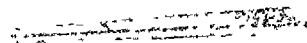
3



4



5



6



THE SURGICAL INSTRUMENTS OF THE HINDUS.

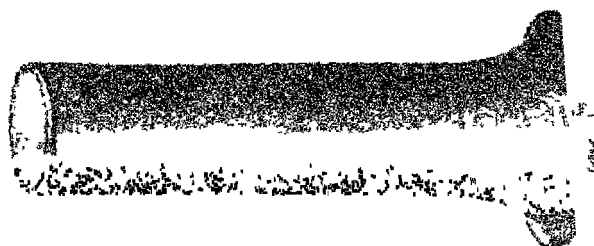
PLATE XVIII.

THE NĀḌĪ YANTRA OR TUBULAR INSTRUMENTS

FIGURE.	PAGE
1.—Kañṭhya Śalyāvalokinī or Throat Speculum ..	109
2.—Mouth Speculum (Modern) B. B Fig. 353 ..	109
3.—Pañchamukha or Speculum with 5 holes ..	110
4.—Trimukha or Speculum with 3 holes ..	110
5.—Śalyaninghātani ..	111

# Surgical Instruments of the Hindus

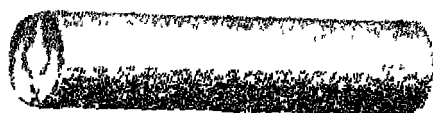
1.



1



3



4



22

ST. JAMES

1875

2

# THE SURGICAL INSTRUMENTS OF THE HINDUS.

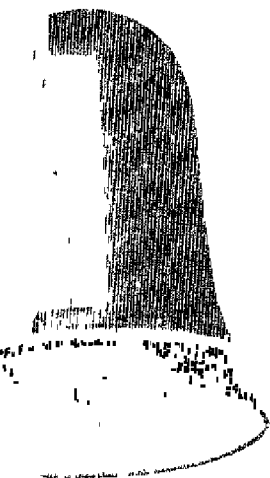
## PLATE XIX.

### THE NAḌĪ YANTRA OR TUBULAR INSTRUMENTS.

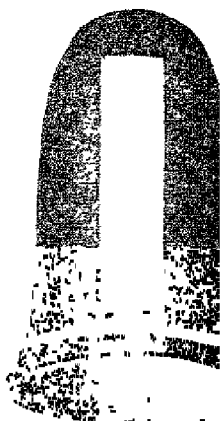
FIGURE	PAGE
1 —Arśa Yantra, or Tubular instrument for piles	112
2 —The same (Vāgbhata)	113
3.—The same, after Thakore Saheb	112
4 —Śamī Yantra	113
5 —Śamīpatra Yantra, after Thakore Saheb	113
6.—Fergusson's Rectal Speculum (Modern) B. B. Fig. 999	113

# e Surgical Instruments of the Hindus.

XIX.



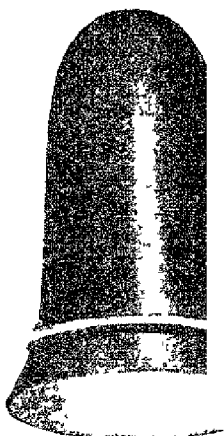
1



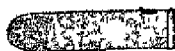
2



3



4



5



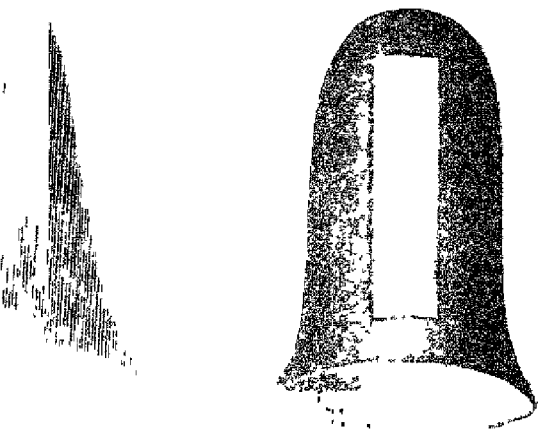
THE SURGICAL INSTRUMENTS OF THE HINDUS.

PLATE XX

THE NĀḌĪ YANTRA OR TUBULAR INSTRUMENTS

FIGURE	PAGE
1.—Bhagandara Yantra, or Tubular Instruments for Fistula-in-ano, with two slits	114
2.—The same, with one slit	114
3.—Nāḍī Yantra, after Thakore Saheb	114

al Instruments of the Hindus.



2



3

# THE SURGICAL INSTRUMENTS OF THE HINDUS.

## PLATE XXI.

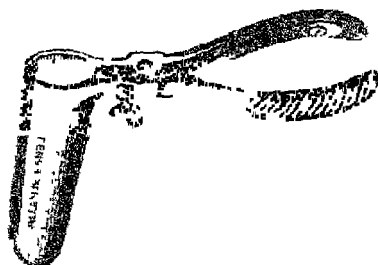
### NĀḌĪ YANTRA OR TUBULAR INSTRUMENTS.

#### TUBULAR INSTRUMENTS FOR NOSE.

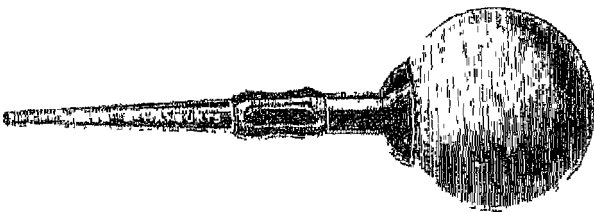
FIGURE.	PAGE
1.—Nasal Speculum .. .	115
2.—Nasal Speculum (modern). A. H. Fig. 2553.	115
3.—Nasal Tube . . . . .	115
4.—Nasal Insufflator (modern) A. H. Fig. 3191.	116
5.—Nāthukaraṇī or single nose-spoon .	84, 116
6.—Yamaka Nāthukaraṇī or double nose-spoon . . . . .	85, 117
7.—Nasal splints . . . . .	117
8.—Langenbeck's nasal plugs (modern). A. S. Fig. 837.	117

The Surgical Instruments of the Hindus.

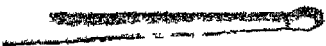
XXI



2



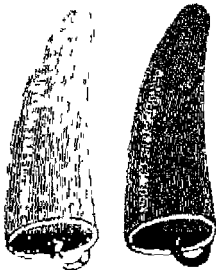
4



5



6





THE SURGICAL INSTRUMENTS OF THE HINDUS.

PLATE XXII.

THE NAQI YANTRA OR TUBULAR INSTRUMENTS.

TUBULAR INSTRUMENTS FOR FINGER

FIGURE	PAGE
1.—Aṅguli Trāṇaka or Finger-guard .	118
2.—Aṅguli Yantra or Finger-guard, after Thakore Saheb . . .	118
3.—Finger-guard (modern) A. S. Fig. 805. .	118
4.—Finger-guard (modern) A. H. Fig 2326 ..	118

# ne Surgical Instruments of the Hindus.

e XXII.



2



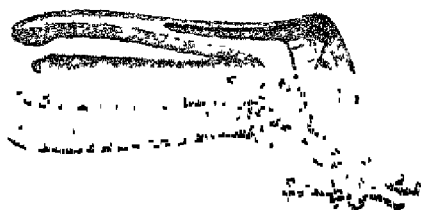
4

PLATE XXIII

NĀḌĪ YANTRĀ OR TUBULAR INSTRUMENTS

TUBULAR INSTRUMENTS FOR VAGINA.

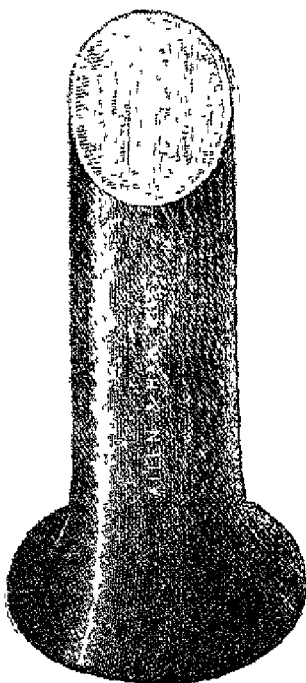
FIGURE.	PAGE
1.—Joni-Vraṇeksana or Vaginal Speculum	119
2.—Nott's Quadrivalve Speculum (modern) K S Fig. 8847	119
3.—Yonyāvek-sana Yantra or Bivalve speculum, after Thakore Saheb . . . . .	119
4.—Fergusson's Vaginal Speculum A. H. Fig. 6103	119



2



3



4

PLATE XXIV

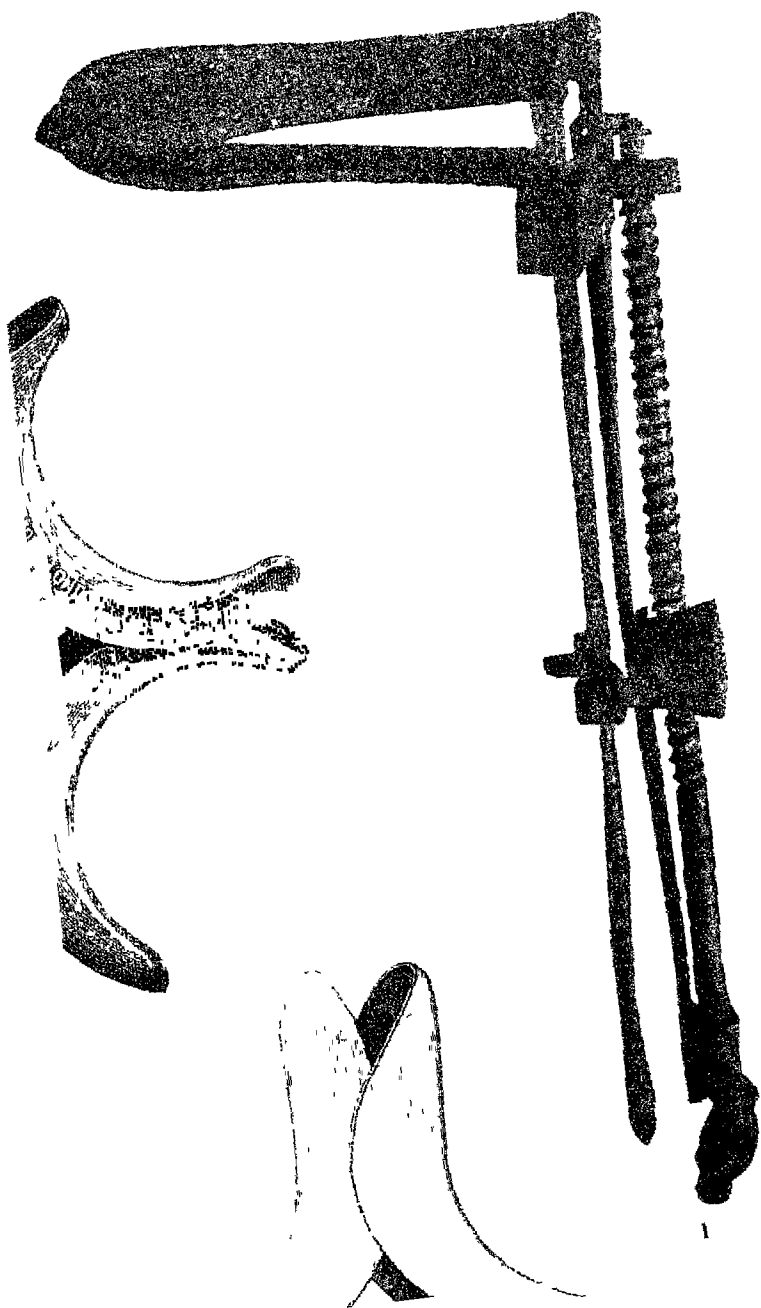
THE NĀDĪ YANTRA OR TUBULAR INSTRUMENTS

TUBULAR INSTRUMENTS FOR VAGINA

FIGURE

- 1.—Trivalve Vaginal Speculum, after Milne  
Pl. XLVIII (Naples Museum)
- 2.—Barnes' Speculum A S Fig 1648. ...
- 3.—Neugebauer's Vaginal Speculum. A. II. Fig. 6103.

ie Surgical Instruments of the Hindus.



THE SURGICAL INSTRUMENTS OF THE HINDUS.

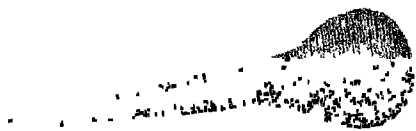
PLATE XXV.

NĀDĪ YANTRA OR TUBULAR INSTRUMENTS.

TUBULAR INSTRUMENTS FOR WOUND.

FIGURE.	PAGE.
1.—Vraṇa-Vastī or Wound-Syringe	121
2.—Viinapraksalana Yantra, after Thakore Saheb	121
3.—Wound-Syringe (modern) A. S. Fig. 2790.	121

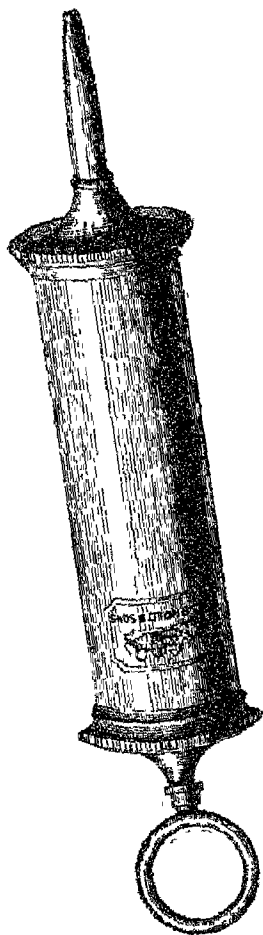
The Surgical Instruments of the Hindus.  
Plate XXV



1



2



3



PLATE XXVI

THE NĀDĪ YANTRA OR TUBULAR INSTRUMENTS.

Tubular Instruments for Ascites and Hydrocele, Canula

FIGURE	PAGE
1 —Dākodara Yantia or Canula for Paracentesis Abdominis	122
2 —Jalodara Yantra or Canula, after Thakore Saheb	122
3 —Canula (Naples Museum), after Milne Pl XXXIX Fig 2	122
4 —Tiocai and Canula Paracentesis abdominis. (modern) A. S. Fig 1441 ..	123
5.—Hydrocele Canula	123
6 —Hydrocele Tiocai and Canula (modern) A. S. Fig. 1436. . . . .	123

# The Surgical Instruments of the Hindus.

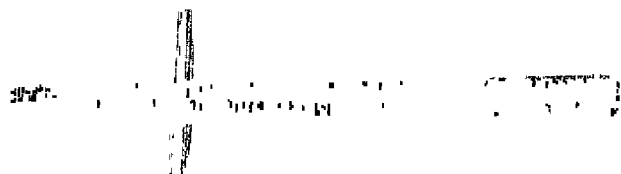
Plate XXVI.



1



2



3



4



5



6

PLATE XXVII

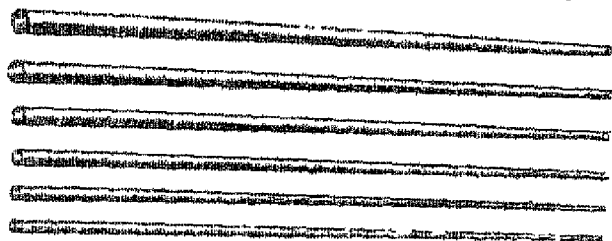
THE NĀDĪ YANTRA OF TUBULAR INSTRUMENTS

TUBULAR INSTRUMENTS FOR URETHRAL STRICTURE

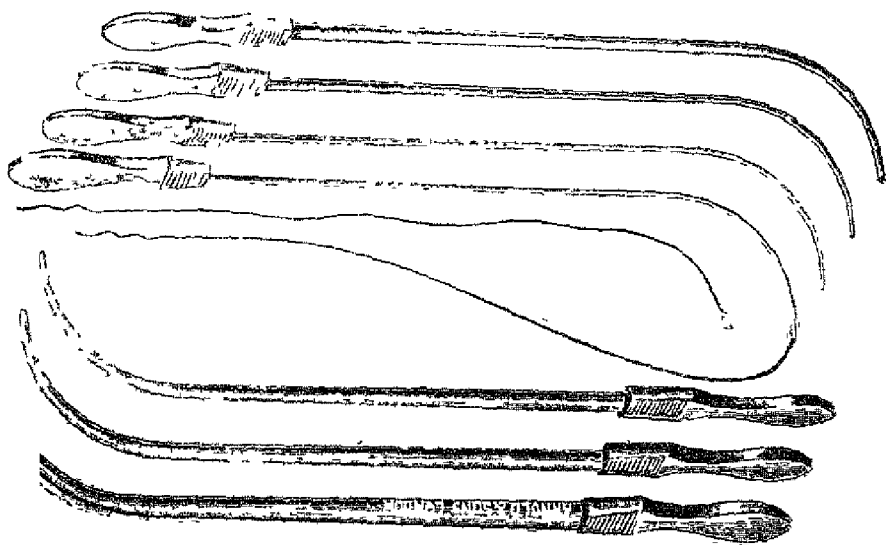
FIGURE	PAGE
1—Urethral Stricture Dilators	123
2.—Bruce Clarke's Bougies Set of seven, steel, tapering, A. S. Fig 2246 and 2247	125

# The Surgica Instruments of the Hindus.

Plate XXVII



1



2

PLATE XXVIII

THE NĀḌĪ YANTRA OR TUBULAR INSTRUMENTS

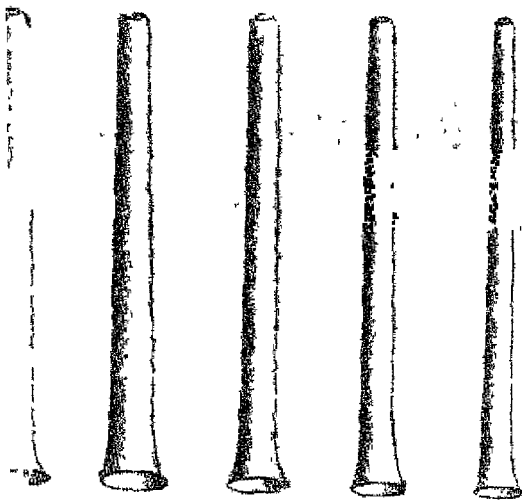
TUBULAR INSTRUMENT FOR RECTAL STRICTURE

FIGURE.

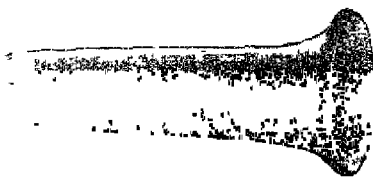
PAGE

1 —Rectal Dilators	124
2 —Rectal Dilators, different sizes	124
3 —Cripp's Rectal Dilators A. S. Fig. 2335	125

gical Instruments of the Hindus.



1



2



3

PLATE XXIX

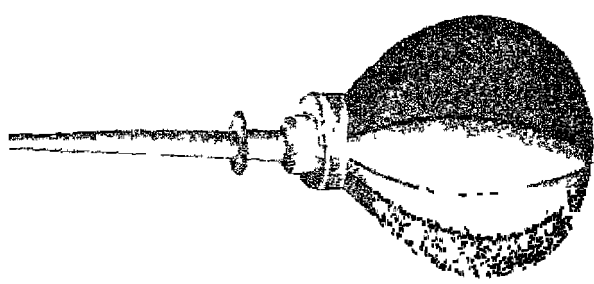
THE NĀDI YANTRA OR TUBULAR INSTRUMENTS

VASTI YANTRA OR RECTAL CLUSTER

FIGURE	PAGE
1.—Vasti-Yantra or Rectal Clyster	129
2 —The same, after Thakore Sahab	129
3 —Enema Syringe (modern) A. H. Fig. 6624	129
4 —Suvasti Yantra, or Rectal Clyster (Veterinary)	131

# Surgical Instruments of the Hindus.

XXIX.



1



2



3

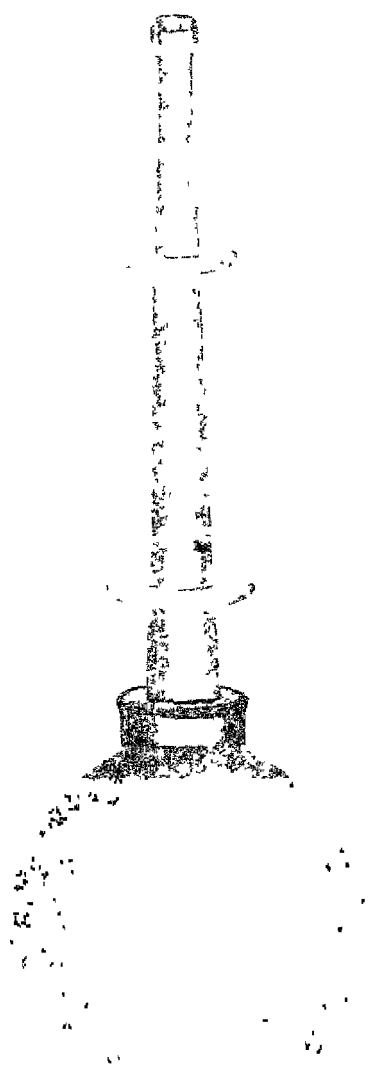




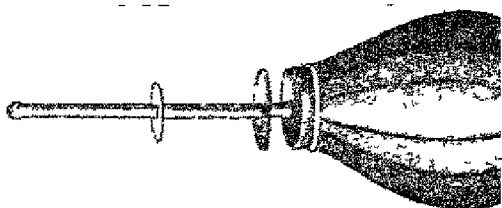
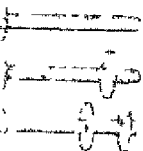
PLATE XXX

THE NĀḌĪ YANTRA OR TUBULAR INSTRUMENTS  
UTTARĀ-VASTI

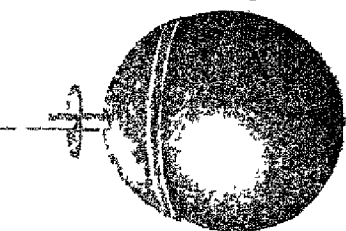
TUBULAR INSTRUMENTS FOR THE URETHRA

FIGURE	PAGE
1—Puspanetia with one, two and three projections	135, 136
2—Uttaravasti for Urethra or Urethral Syringe, male	136
3—The same, female	136
4—Urethral Syringe (modern). A H Fig 3869	136
5—Uttara-Suvasti (Veterinary) ...	131

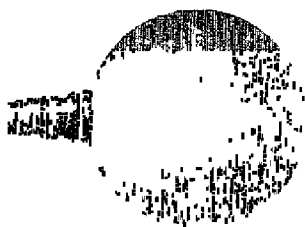
# The Surgical Instruments of the Hindus.



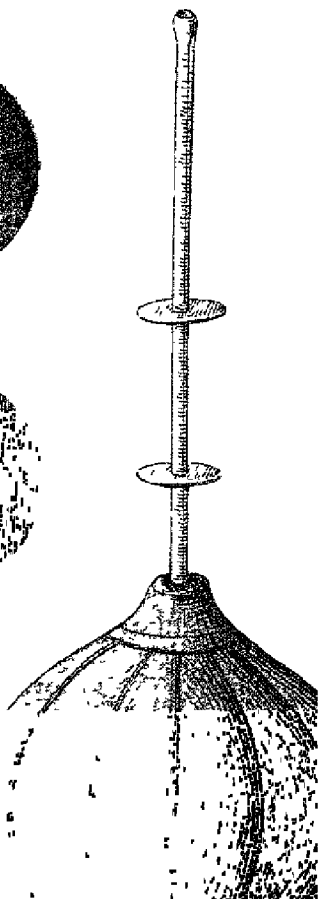
2



3



4



THE SURGICAL INSTRUMENTS OF THE HINDUS

PLATE XXXI.

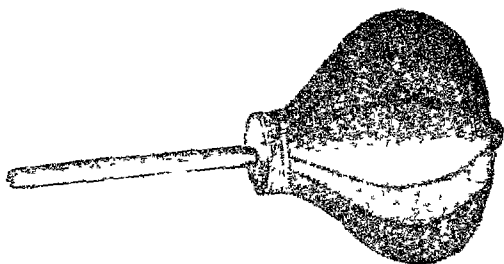
THE NĀḌI YANTRA OR TUBULAR INSTRUMENTS

UṬṬARĀVASEḌI

TUBULAR INSTRUMENTS FOR VAGINA AND UTERUS

FIGURE	PAGE
1.—Vaginal Syringe	138
2.—Vaginal Syringe (modern) A II Fig 6626	138
3.—The same A S Fig 2143.	138
4.—Uterine tube	139
5.—Uterine tube (Budm's) A. S. Fig 1801	139
6.—Uterine Syringe	139

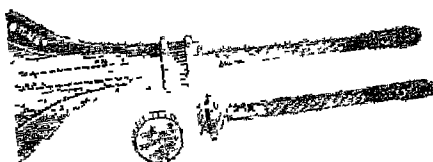
# Surgical Instruments of the Hindus.



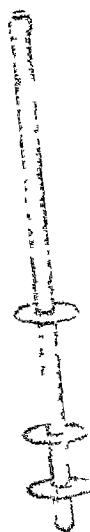
1



2



3



4



5

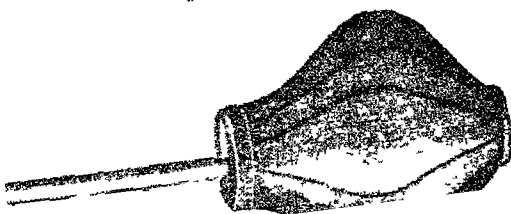


PLATE XXXII.

THE NĀDI YANTRA OR TUBULAR INSTRUMENTS.

TUBULAR INSTRUMENTS FOR INHALATION AND FUMIGATION

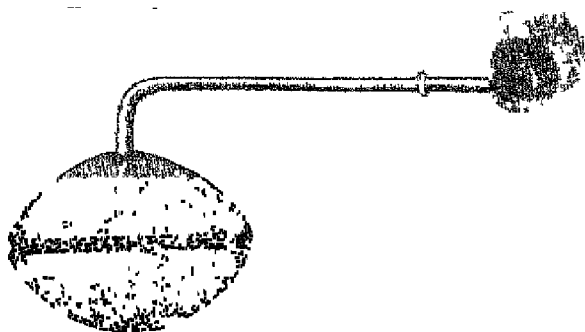
FIGURE	PAGE.
1.—Dhūmanālī or tube for smoking	140
2.—Dhūmanālī or tube of medicinal paste	141
3.—Mallaka Saṁpuṭa or Śaiṭba Saṁpuṭa The fumigator for inhalation, wound fumigation, and vaginal and uterine fumigation	142
4.—The fumigator, after Hippocrates and Śārṅgadhara	146, 322
5.—Bronchitis kettle (modern) B. B. Fig. 401.	145

# The Surgical Instruments of the Hindus

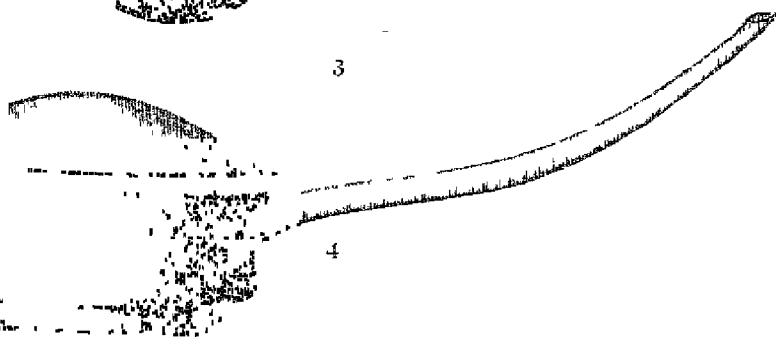
XXXII



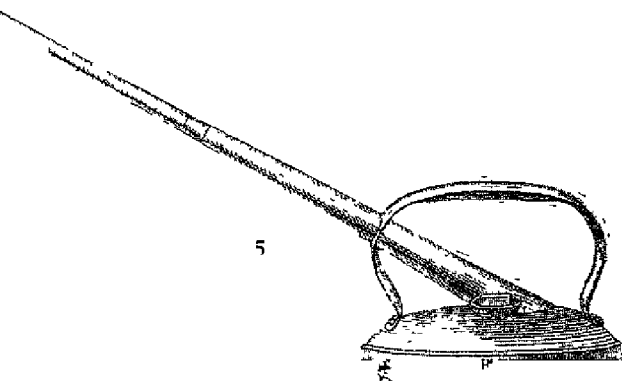
2



3



4



5

# THE SURGICAL INSTRUMENTS OF THE HINDUS.

## PLATE XXXIII

### THE NĀḌĪ YANTRA OR TUBULAR INSTRUMENTS

#### TUBULAR INSTRUMENTS FOR CUPPING.

FIGURE	PAGE
1.—Sṛṅga or Horn	148
2.—Cupping horns as used in Kordotan, Wellcome. Fig. 200.	156
3.—Alābu Yantra or Gourd	156
4.—Cupping glass (modern) B. B. Fig 281	157
5.—Ghaṭī Yantra	157

# The Surgical Instruments of the Hindus.

I.



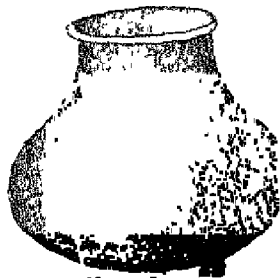
1



2



3





# THE SURGICAL INSTRUMENTS OF THE HINDUS.

## PLATE XXXIV.

### THE NĪDĪ YANTRA OR TUBULAR INSTRUMENTS

#### TUBULAR INSTRUMENTS FOR CUPPING

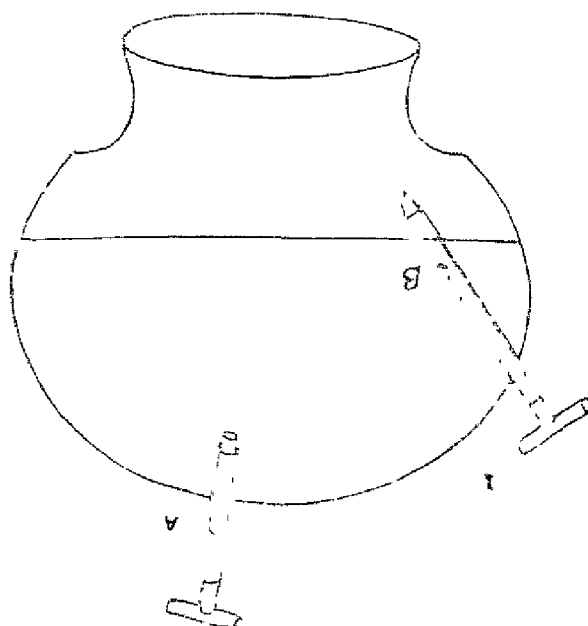
FIGURE	PAGE
1.—Egyptian cupping horn, Milne after Alpinus Pl. XXXV.II Fig 1	153
2.—Alexandrian Cup, Milne after Hero Pl. XXXVII Fig. 2. ...	153

# The Surgical Instruments of the Hindus.

Plate XXXIV.



1



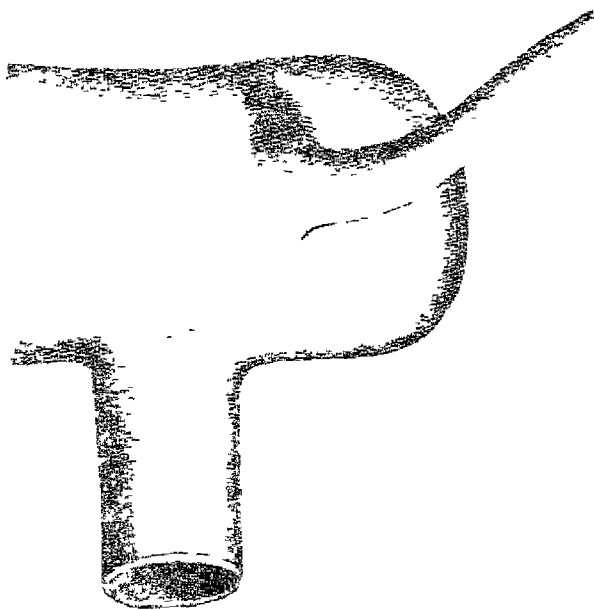
## 31

•  
•  
•  
•

1

FIGURE	PAGE
1 —Cup illustrated by Alpinus Milne Pl. XXXVI Fig. 2	153
2 —Greek Cup. (Naples Museum) Milne Pl. XXXV.	153

# The Surgical Instruments of the Hindus



1



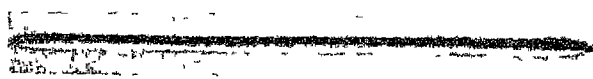
2

PLATE XXXVI.

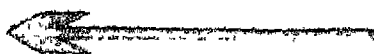
ŚAIĀKĀ OR RODS

FIGURE	PAGE
1—Gaudupada Śalā or Earthworm probe	155
2—Śarapunkha Śalā or Arrow-wing probe	155
3.—Śarpafanā Śalā or Snake's hood probe	156
4—Vadhā śalā or Fish-hook probe	156
5—Masūradala-baktia Śalā or Masūra-pulse probe	157
6.—Prāmārjana Śalā or Swab probe	157
7—Swab probe with Anal Scoop (modern). A. H. Fig. 2037	157
8.—Spathomele or spatula probe of the Greeks. Milne, Plate XII. Fig. 3	157

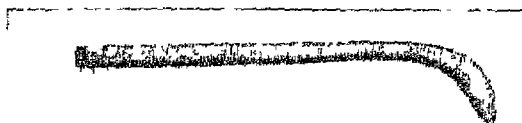
The Surgical Instruments of the Hdinus.  
Plate XXXVI.



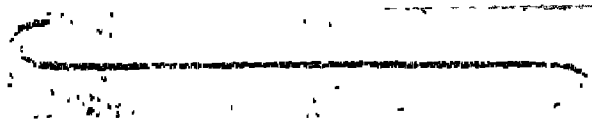
1



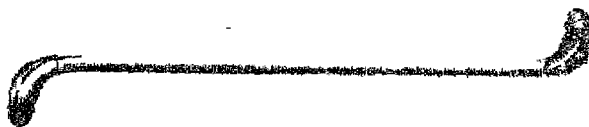
2



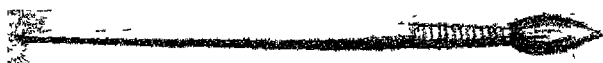
3



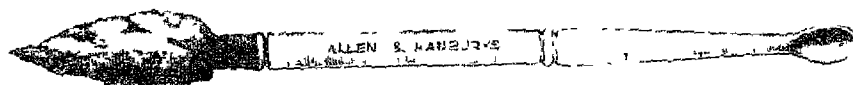
4



5



6



7

PLATE XXXVII

ŚALĀKĀ OR RODS.

FIGURE	PAGE
1.—Daibhākṛti Khallamukha Śalā or Spoon-shaped probe	158
2.—Davyākṛti Śalā, after Thakore Sahab	158
3.—Nakha-mukha Śalā or Nail-shaped probe	159
4.—Jāmvavousṭha Śalā or Jāmbula probe	159
5.—Aṅkuśa Śalā or goad probe	159
6.—Kolāsthūḍala Śalā or Jujube probe	160
7.—Cyathiscomele Milne. Pl XIV Fig 3	160

The Surgical Instruments of the Hindus

1

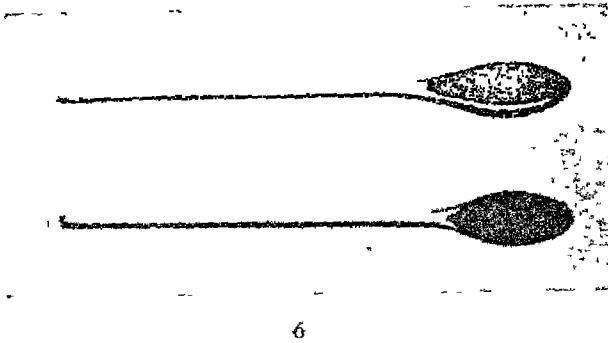
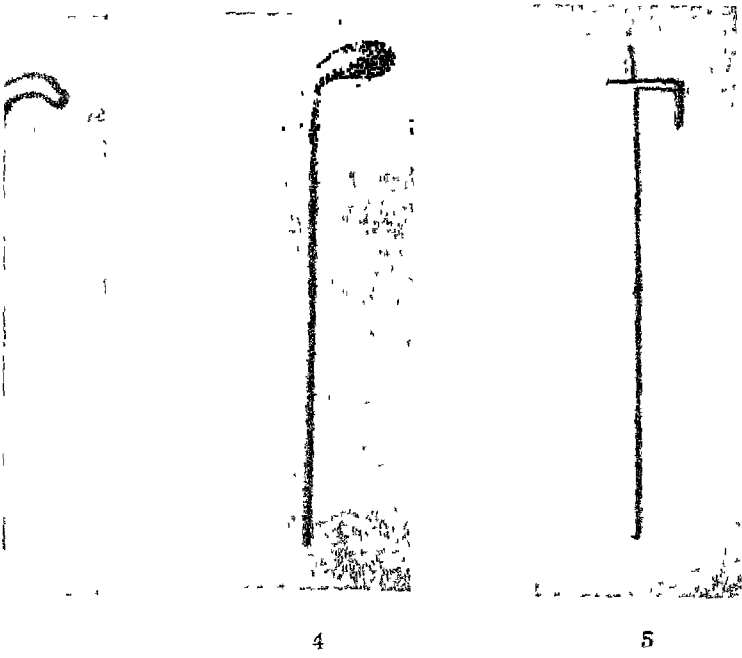
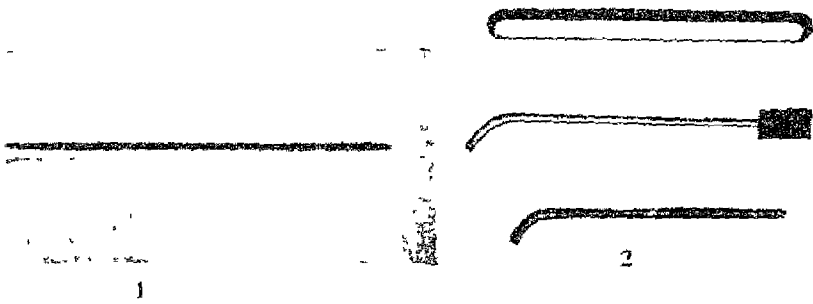




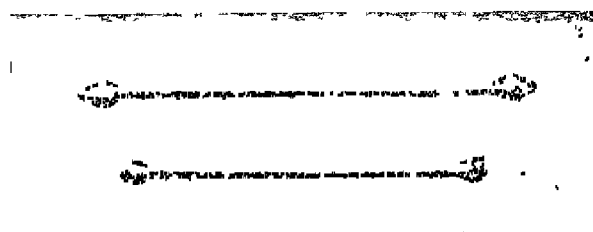
PLATE XXXVIII.

ŚALĀKĀ OR RODS.

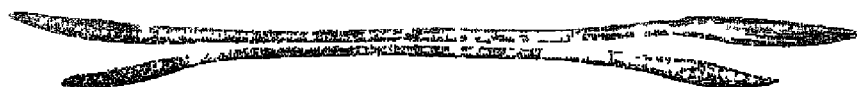
FIGURE.	PAGE.
1—Mukulāgṇa Śalā or Bud-shaped collyrium probe	160
2—Ancient collyrium probes found in the Bihat excavations. Princep. Pl. IV Fig 18	162
3—Greek specillum with olivary end. Milne Pl. XI. fig. 5	163
4—Kārṇa Śodhana or Ear cleaner	163
5.—Director with scoop (modern) A. S. Fig. 278.	164
6.—Śalākā Yantia, after Thakore Saheb	162
7.—Snuhi Yantia, after Thakore Saheb	162

# The Surgical Instruments of the Hindus.

Plate XXXVIII



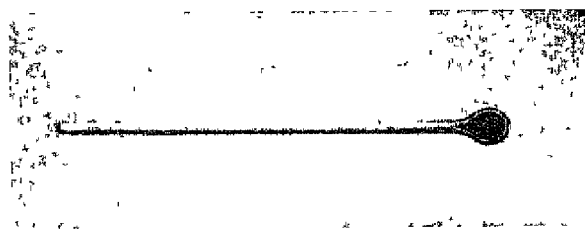
1



2



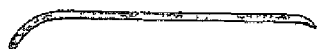
3



4



5



# THE SURGICAL INSTRUMENTS OF THE HINDUS.

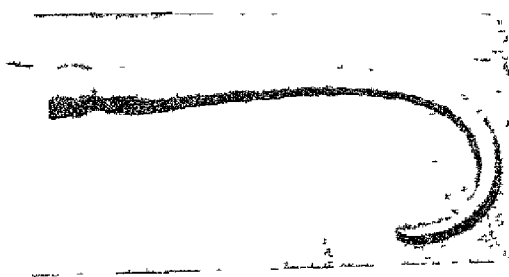
## PLATE XXXIX.

### ŚALĀKĀ OR RODS

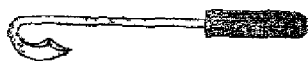
FIGURE.	PAGE
1.—Gaibha Śanku or Foetus or Traction hook	165
2.—The same, after Thakore Saheb	165
3.—Baines' Blunt hook (modern) A. S. Fig. 2031.	166
4.—Śanku Yantra, after Thakore Saheb	165
5.—Yugma Śanku, or Midwifery forceps, after Thakore Saheb	166
6.—Anderson's Midwifery Forceps (modern) A S. Fig 1964.	167

# Surgical Instruments of the Hindus

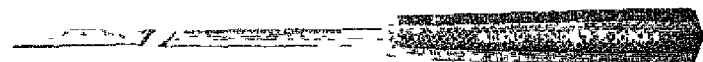
IX.



1



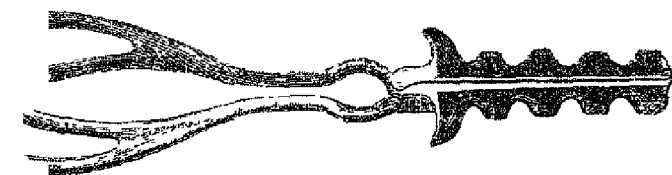
2



3



5



6

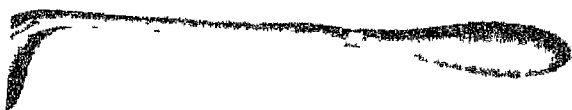
## PLATE XL

## ŚALĀKĀ OR RODS.

FIGURE.	PAGE.
1.—Agrabakra or Sarpapaṇā Śalā or Snake's hood probe . . . . .	168
2.—Aśmariharana Yantra or Stone extractor, after Thakore Saheb . . . . .	168
3.—Enichsen's Lithotomy Scoop, A. S. Fig. 2474 . . .	169
4.—Lithotomy forceps (modern) A. S. Fig. 2446 . .	169
5.—Śaṇapuṅkhamukha Śalā or Tooth-elevator . . .	171
6.—Tooth Elevator, after Thakore Saheb . . . . .	171
7.—Tooth Elevator (modern) A. S. Fig. 1404. . . .	171

# The Surgical Instruments of the Hindus

Plate XL



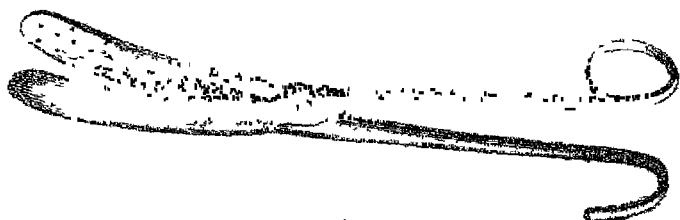
1



2



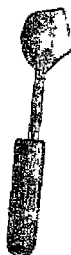
3



4



5



6

PLATE XLI.

ŚALĀKĀ OR RODS

FIGURE	PAGE.
1.—Ardhacandhamukha Śalā or Half-moon probe	171
2 —Musala or Pestle	172
3.—Urethral Probe (Suśruta)	174
4 —Urethral Probe (Caraka)	174
5.—Urethral Bougie (modern) A. S. Fig. 2241	174
6.—Urethral Bougie (modern) A. S. Fig. 2233	174



1



2



3



4



5



6



# THE SURGICAL INSTRUMENTS OF THE HINDUS

## PLATE XLII.

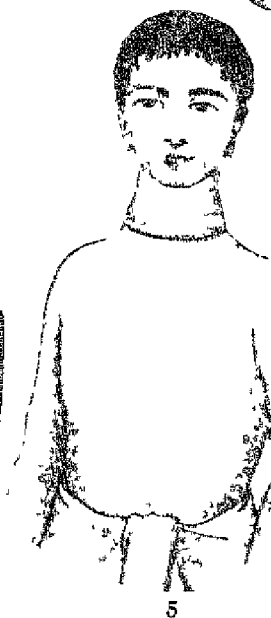
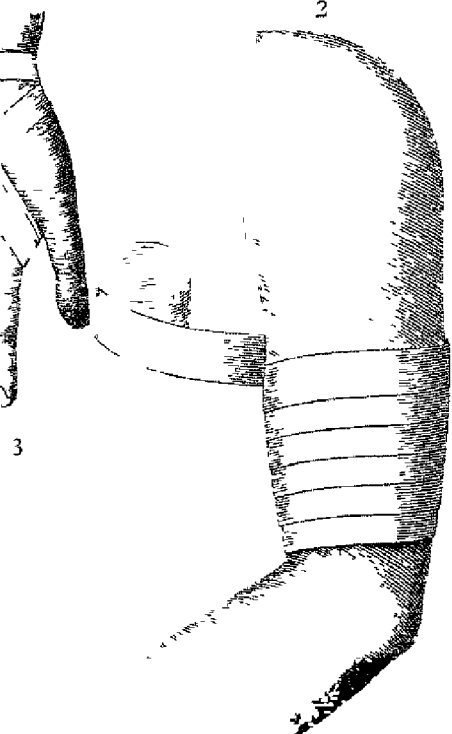
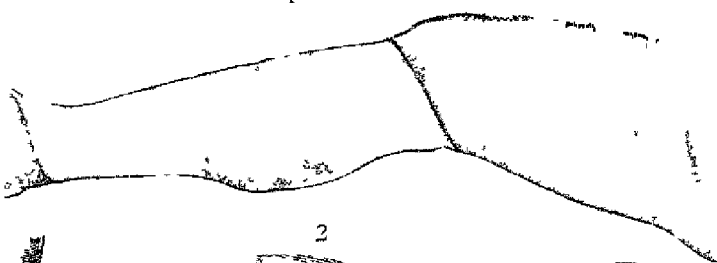
### UPAAYANTRA OR ACCESSORY INSTRUMENTS.

#### PATTA OR BANDAGES.

FIGURE	PAGE
1.—Kośa or Sheath. Heath, Fig 11	177
2.—Dāma	177
3.—Svastika or Circular Cross Bandage. Esmarch Fig. 33.	177
4.—Anuvellita or Encircling Bandage. Esmarch. Fig 27.	177
5.—Pīṭolī	177

# The Surgical Instruments of the Hindus

te XLII



# THE SURGICAL INSTRUMENTS OF THE HINDUS.

## PLATE XLIII.

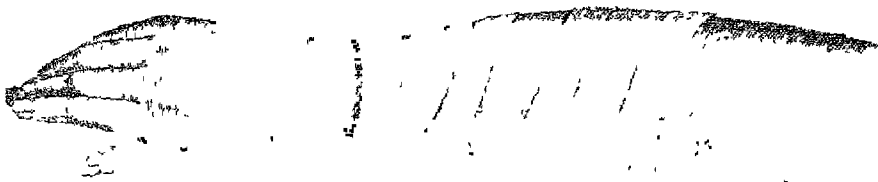
### UPAYANTRA OR ACCESSORY INSTRUMENTS.

#### PATTA OR BANDAGES

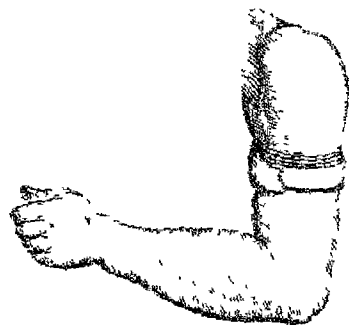
FIGURE		PAGE.
1.—	Mandala or Circular Bandage Esmarch Fig 28.	177
2.—	The same, Greek. Adams Vol II Pl VI Fig 1	177
3 —	Sthagikā or Supporter .	178
4.—	Yamaka or Double Bandage . .	178

# The Surgical Instruments of the Hindus

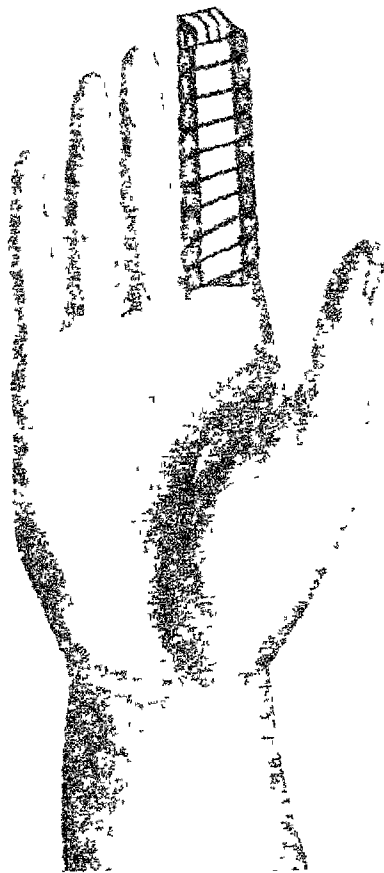
Plate XLIII.



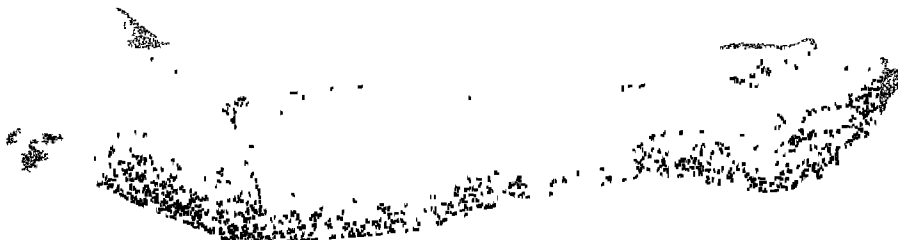
1



2



3



# THE SURGICAL INSTRUMENTS OF THE HINDUS.

## PLATE XLIV

### UPAYANTRA OR ACCESSORY INSTRUMENTS.

#### PATTA OR BANDAGES.

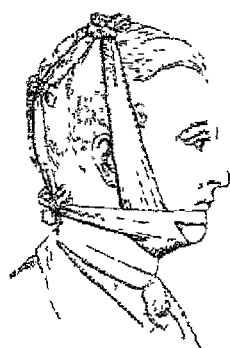
FIGURE		PAGE
1	—Khattā or four-tailed bandage	178
2.	—The same Greek C. C. G. Pl. XLIV	. 178
3.	—The same (modern) Swam Fig. 13	. 178
4	—Cīna or banner bandage. Esmarch. Fig 101.	. 178

# The Surgical Instruments of the Hindus

## Plate XLIV

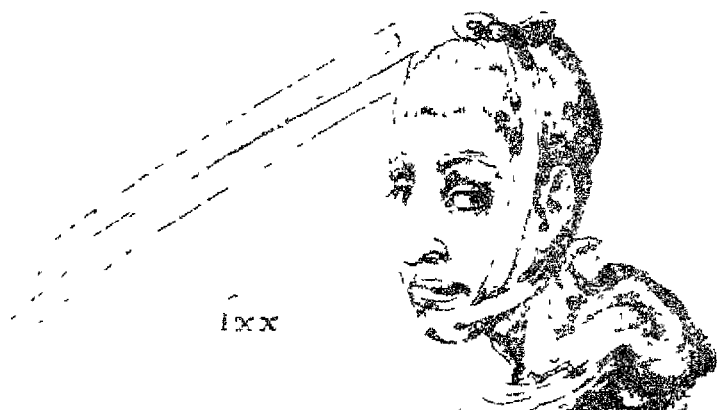


1



2

*Junctura ad mentum*



1xx

3



4

PLATE XLV.

UPAYANTRA OR ACCESSORY INSTRUMENTS

PAITA OR BANDAGES

FIGURE.	PAGE.
1—Vivandha or circular chest bandage	178
2—Vitāna or canopy bandage Esmarch Fig 92	178
3.—Gophaṇḍ or sling. Esmarch. Fig. 102.	178
4.—Pancāṅgī or five tailed bandage	179
5—The same. Greek. C. C. G. Pl LIII.	179

# The Surgical Instruments of the Hindus.

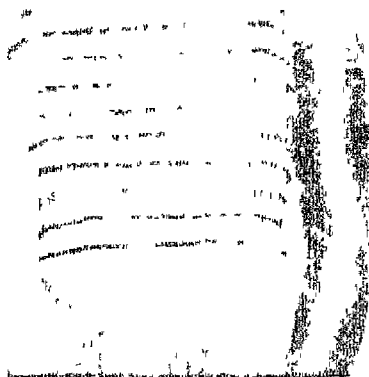
Plate XLV



1



2



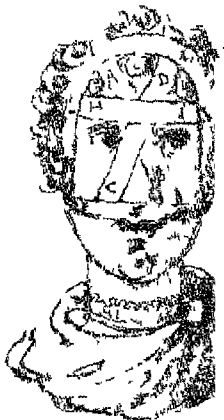
3



4



5



6



PLATE XLVI.

UPAYANTRA OR ACCESSORY INSTRUMENTS

FIGURE.	PAGE
1 —Udara ves-ta or Abdominal Binder	181
2 —Abdominal Binder (modern) A. H. Fig. 8170	181
3 —Hair cover before operation	183
4.—Leather sling	184
5 —Leather bandage for prolapse of the Rectum	184
6 —Leather ligature	146

*urgical Instruments of the Hindus.*

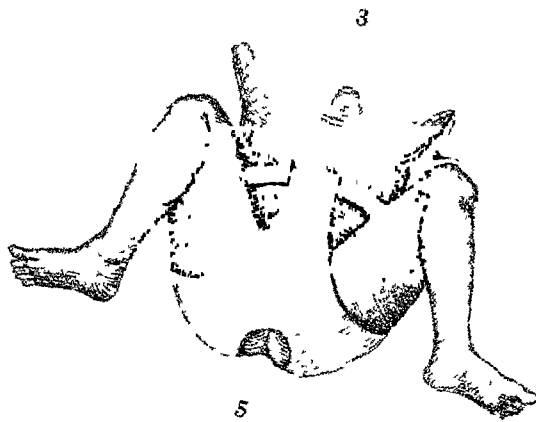


PLATE XLVII

UPAYANTRA OR ACCESSORY INSTRUMENTS

FIGURE	PAGE
1 --Field hospital (modern) Porter. Fig 25	181

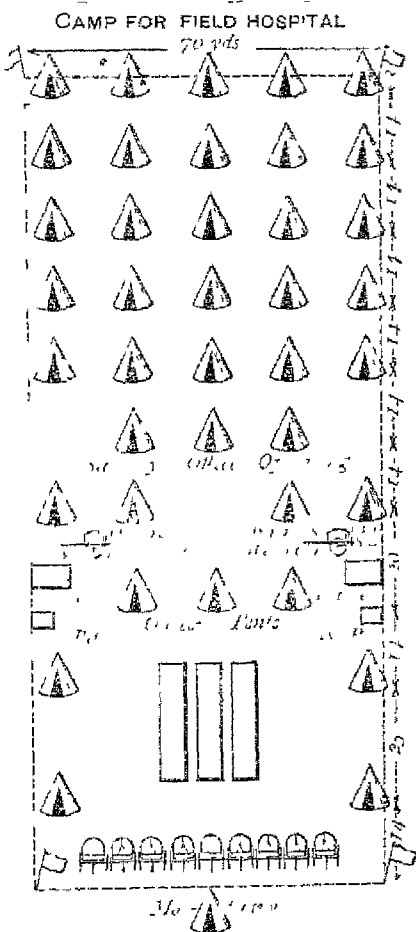


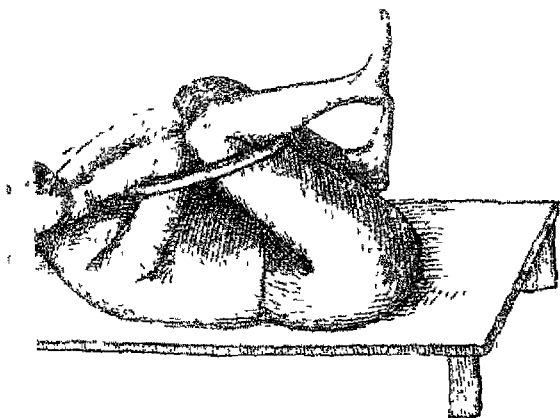
PLATE XLVIII.

UPAYANTRA OR ACCESSORY INSTRUMENTS

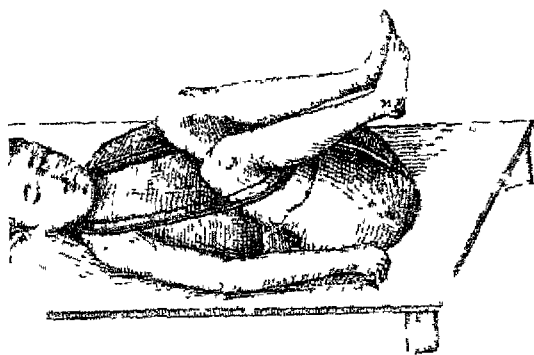
YANTRA-ŚĀṬAKA OR BINDING APPARATUS

FIGURE	PAGE
1.—Yantia Śāṭaka or Incision apparatus	185
2.—Yantra Śāṭaka or Binding apparatus for pile	186
3.—Yantia Śāṭaka or Binding apparatus for phlebotomy	186

# al Instruments of the Hindus



1



2



3

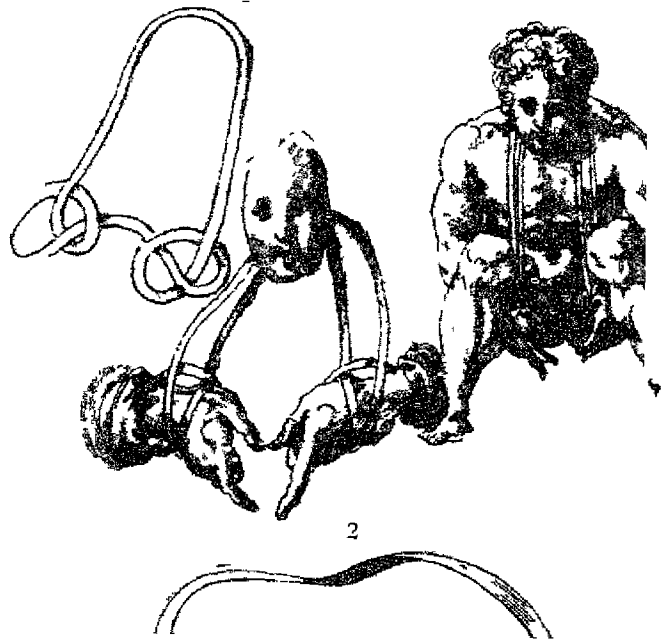
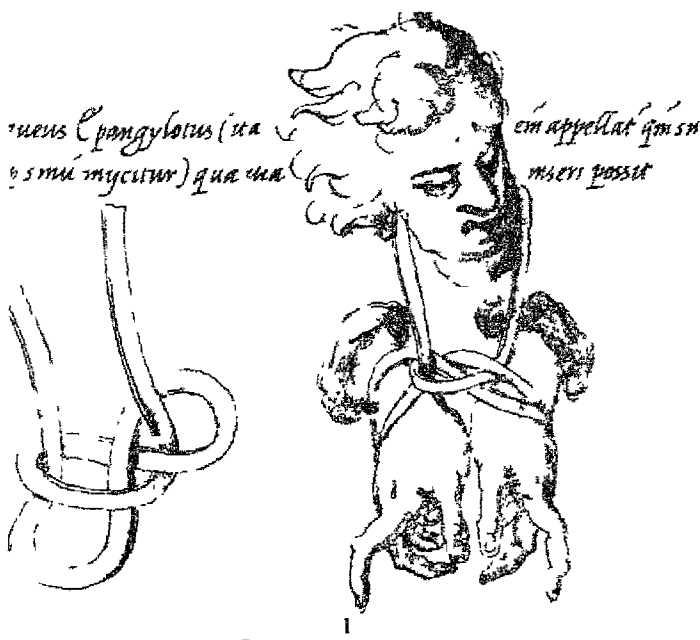
PLATE XLIX.

UPAYANTRA OR ACCESSORY INSTRUMENTS

Yatra Śāṭaka or Binding Apparatus.

FIGURE.		PAGE.
1.—	Binding apparatus of the Greeks, C C G Pl LXIX	187
2.—	The same „ Pl. LXX	187
3.—	Lithotomy Strap (Cupp's). A. S. Fig. 2509.	187

ne Surgical Instruments of the Hindus.  
e XLIX.



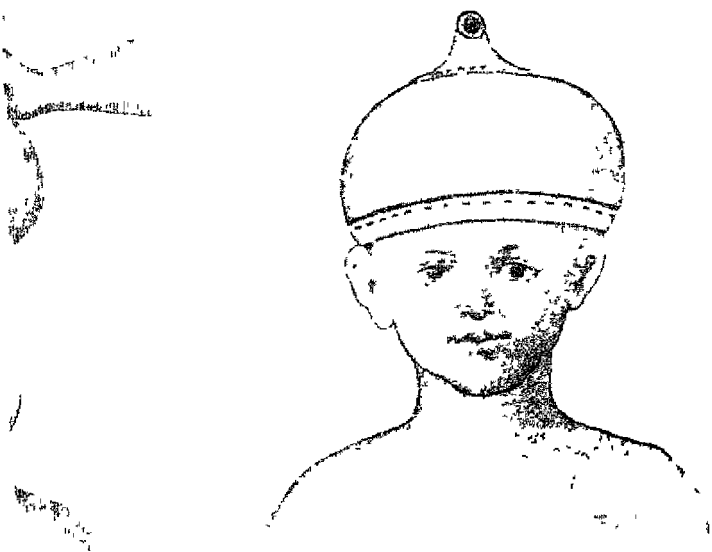


# THE SURGICAL INSTRUMENTS OF THE HINDUS

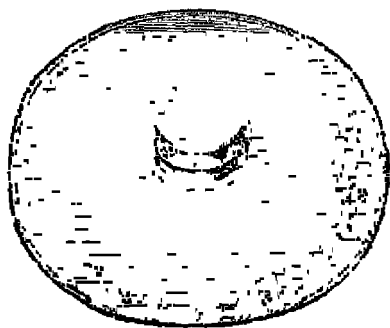
## PLATE L.

### UPAYANTRA OR ACCESSORY INSTRUMENTS.

FIGURE	PAGE
1.—Śro-vāsti or Leather bag for the head (Su-ruta) . . .	188
2.—The same (Śārngadhara) ...	189
3.—Ice bag for head (conical) A. H. Fig. 8282 ..	188
4.—Ice bag (Round). A. H. Fig. 8293 . . .	188



2



4

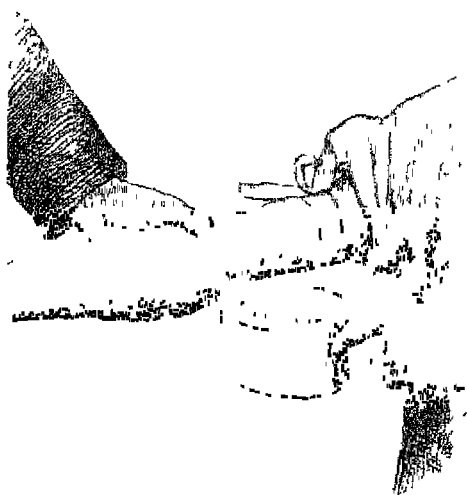
# THE SURGICAL INSTRUMENTS OF THE HINDUS

## PLATE LI

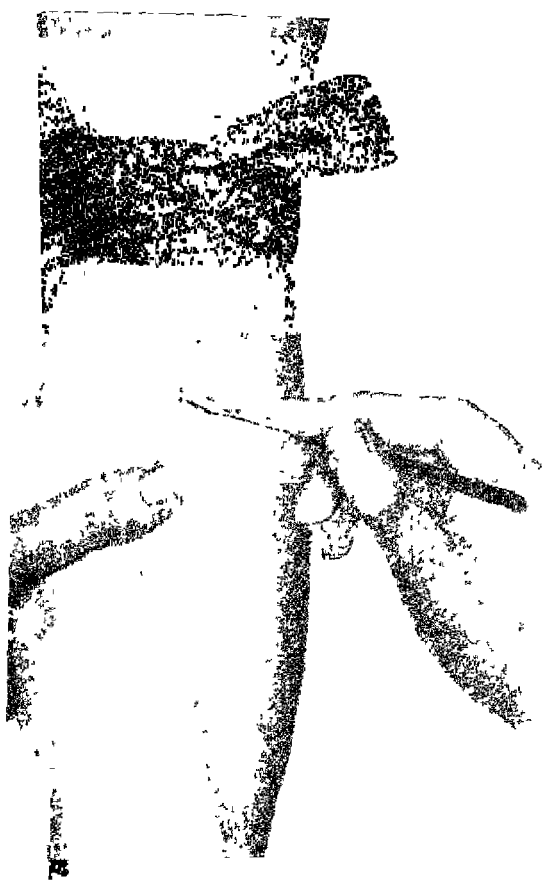
### UPAYANTRA OR ACCESSORY INSTRUMENTS.

FIGURE		PAGE
1	—Leather band for phlebotomy at the elbow	190
2	—Band for phlebotomy Esmarch. Pl. XXIII	190

# Local Instruments of the Hindus.



1



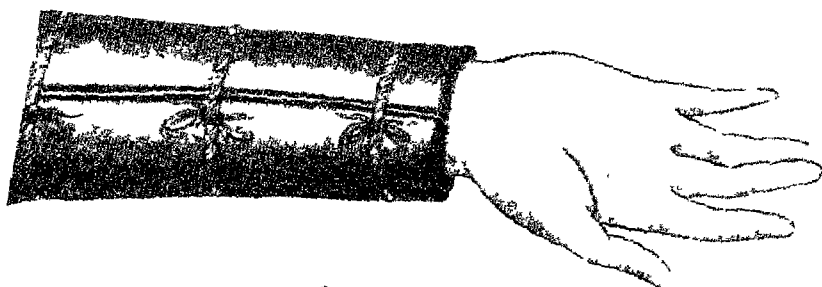
2

## PLATE LII.

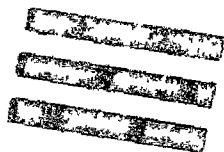
## UPAYANTRA OR ACCESSORY INSTRUMENTS.

FIGURE.		PAGE.
1	—Bark sphut ... ..	193
2.	—Bamboo strips ..	194
3	—Splints of the Greeks. Adams. Vol II Pl. VIII	
	Fig 1 . . . . .	193
209.	—The same ... .. " " " Fig. 2 ...	193

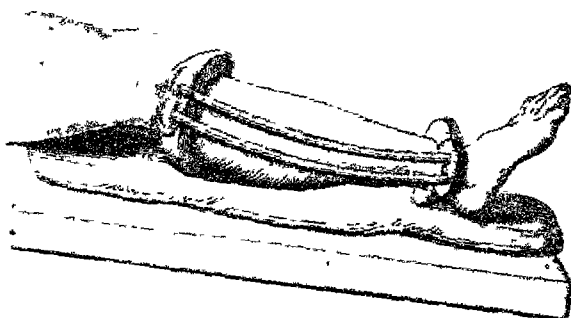
# The Surgical Instruments of the Hindus.



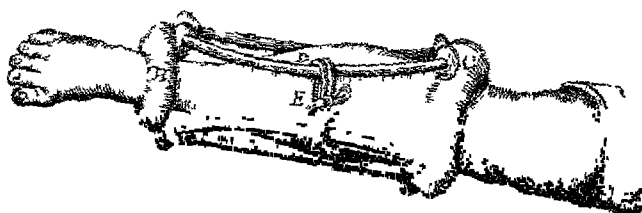
1



2



3



4

PLATE LIII.

UPAYANTRA OR ACCESSORY INSTRUMENTS.

FIGURE.

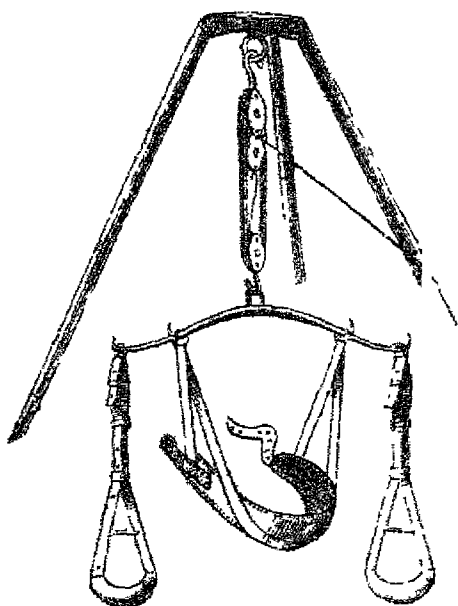
- 1.—Reduction of dislocation of the neck . .
- 2.—Sayre's Suspension apparatus. A. S. Fig. 2997.
- 3.—Jury mast. A. S. Fig. 2998. ..

# The Surgical Instruments of the Hindus

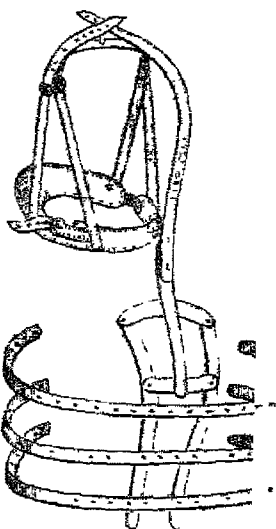
te 1111



1



2



3

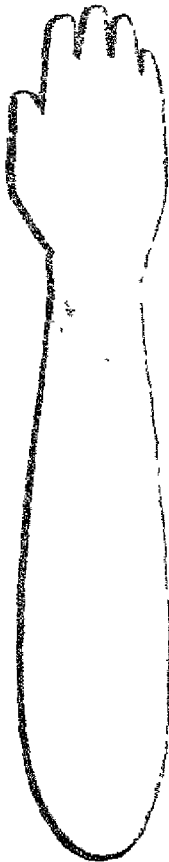


PLATE LIV.

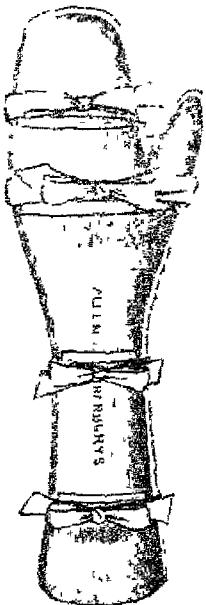
UPAYANTRA OR ACCESSORY INSTRUMENTS

FIGURE	PAGE
1.—Clutch (modern) A S. Fig. 3061	195
2.—Wooden splint for hand . . . . .	196
3.—The same (modern) (Pemberton's) A H. Fig. 7456	196
4.—Stone Roller . . . . .	197, 198
5.—Mudgara or hammer . . . . .	198
6.—The same. Greek. Adams. Vol. I. Pl. III. Fig. 5	199

gical Instruments of the Hindus.



2



3

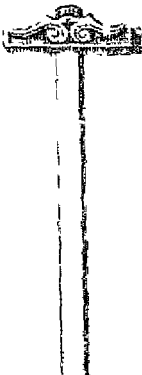


PLATE LV.

UPAYANTRA OR ACCESSORY INSTRUMENTS

FIGURE.	PAGE
1.—Reduction of dislocation of the lower jaw	... 201
2 —The same (modern). Erichsen. Vol. I. Fig. 243.	. 201

# I Instruments of the Hindus.



I



THE SURGICAL INSTRUMENTS OF THE HINDUS

PLATE LVI.

UPAYANTRA OR ACCESSORY INSTRUMENTS.

FIGURE	PAGE.
1.—The same, after the Greeks. C C G. Pl. XIX	... 201

# The Surgical Instruments of the Hindus.

LVI.

---

119



# THE SURGICAL INSTRUMENTS OF THE HINDUS.

## PLATE LVII

### UPAYANTRA OR ACCESSORY INSTRUMENTS.

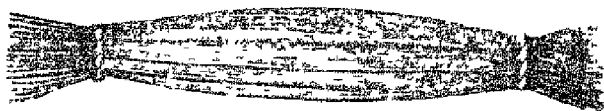
#### FIGURE

#### PAGE.

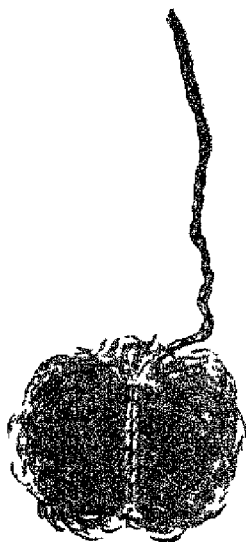
1.—Vāla vartī or Hair tents or drains ...	206
2.—Kesonduka or Hair bundle ...	206
3.—Probang (modern) A. H. Fig. 3267 ...	207
4.—El Kamaia Anderson Fig 90. Wellcome	217

# The Surgical Instruments of the Hindus.

Plate LVII.



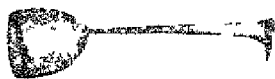
1



2



3



4



PLATE LVIII.

THE MAṆḌALĀGRA ŚASTRA OR ROUND HEADED KNIFE

FIGURE.	PAGE.
1 —Maṇḍalāgra Śastra or Round headed knife (Suśruta) .	225
2 —The same. After Wise .	225
3.—The same, for eye operation (Suśruta)	226
4.—Knife for Plastic operation on eyelid (Albucasis). Milne Pl IX. Fig 3	228
5 —The embryotome (Albucasis) Milne, Pl. VIII Fig 7 .	226

# The Surgical Instruments of the Hindus.

1.



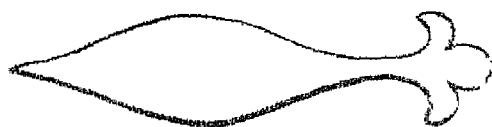
2



3



4



5

PLATE LIX

THE MAṆḌALĀGRA ŚĀSTRA OR ROUND HEADED KNIFE

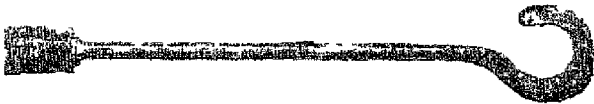
FIGURE	PAGE.
1.—Maṇḍalāgra Śāstra or Round headed knife (Vāgbhata) .. .	225
2.—The same. After Thakore Saheb ..	225
3.—Ramsbotham's Decapitating Hook A S. Fig. 2027	225
4.—Maṇḍalāgra Śāstra or Razor-like round headed knife (Dallana) .	225

Surgical Instruments of the Hindus

Hand of the artist



2



3

Hand of the artist

Hand of the artist

## PLATE LX.

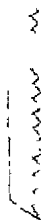
## KARAPATRA ŚASTRA OR SAW

FIGURE	PAGE-
1 —Karapatra or Saw . . . . .	230
2.—The same After Wise . . . . .	230
3.—The same. After Thakore Sahib . . . . .	230
4 —The saw as used by the Greeks. Milne, Pl. XLf. Fig 3 . . . . .	231
5 —The Saw (Modern) . . . . .	231
6 —Trephine of the Greeks. Adams Vol. I. Pl I. Fig. 3 . . . . .	232
7.—The Trephine (Modern) A. H Fig. 1145. . . . .	232

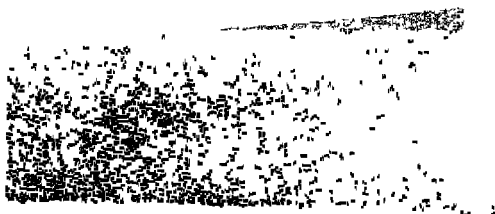
192



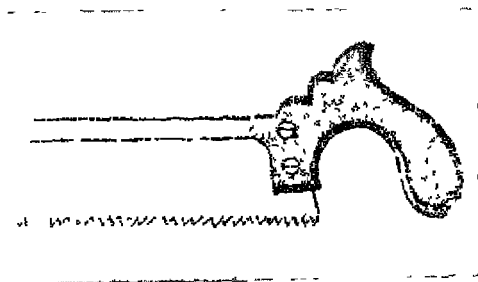
1



2



4



5

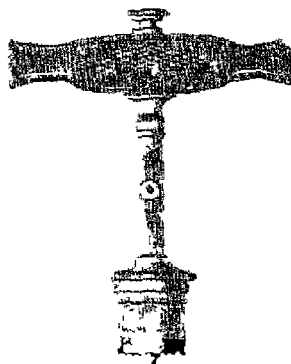


PLATE LXI.

VRDDHIPATRA ŚASTRA OR KNIFE

FIGURE	PAGE
1.—Vrddhipatra or Knife .	233
2.—The same, curved Dīrghavaktia or long mouthed .	233
3.—The same, curved. Hrasvavaktia or short mouthed . . . . .	233
4.—Vrddhipatra knife After Wise	233
5.—Vrddhipatra knife After Thakore Shaheb .	233
6.—Syme's Abscess knife A H. Fig. 430. .	233

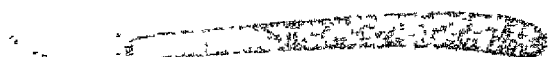
# The Surgical Instruments of the Hindus.

Plate LXI



1

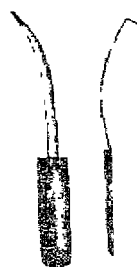
2



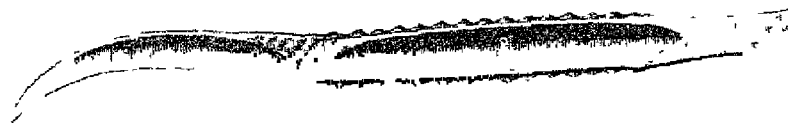
3



4



5



6



PLATE LXII.

NAKHA SASTRA OR NAIL PARER

FIGURE	PAGE.
1 --Nakha Śastra or Nail parer, straight and oblique . . . . .	237
2 --The same After Wise . . . . .	237
3 --The same. After Thakore Sahib . . . . .	237
4 --Nakha Śastra, a double instrument . . . . .	237
5 --Rampaka . . . . .	238
6.--Nail knife and cleaner A II Fig 10244 . . . . .	238

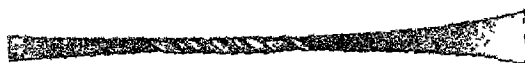
# Surgical Instruments of the Hindus



2



3



4



5



# PLATE LXIII

## MUDRIKĀ ŚĀSTRA OR FINGER KNIFE

FIGURE	PAGE
1.—Mudrikā or Anguli Śāstra or Finger knife (Vāgbhaṭa)	238
2.—The same After Thakore Sahib	239
3.—The same. After Wise	239
4.—Simpson's Ring Scalpel	239
5.—Maver's Ring-knife for the removal of adenoids from the nose. Waggett Fig 70	239
6.—Finger knife, Veterinary (Modern) Milne. Pl. VII Fig 1	240

# Le Surgical Instruments of the Hindus.

ate LXIII



1



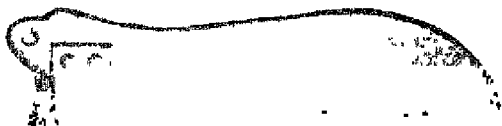
2



4



5



# PLATE LXIV.

## UTPALAPATRA ŚASTRA.

FIGURE	PAGE.
1 —Utpalapatra Śastri or Phlebotome	241
2.—The same. After Wise	241
3 —The same. After Thakore Sahab	241
4.—Myrtle leaf shaped knife used by the Greeks Milne. Pl VII Fig 2	242
5 —Syme's knife for Ankle-joint. A II Fig 253	242

## ARDHADHĀRA ŚASTRA OR HALF-EDGED KNIFE

6 —Ardhadhāra or Half-edged knife	243
7.—The same. After Wise	243
8 —The same. After Thakore Sahab ...	243

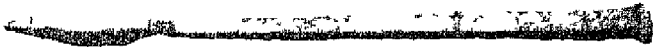
The Surgical Instruments of the Hindus.

te LXIV.



2

3



4



5



7

6

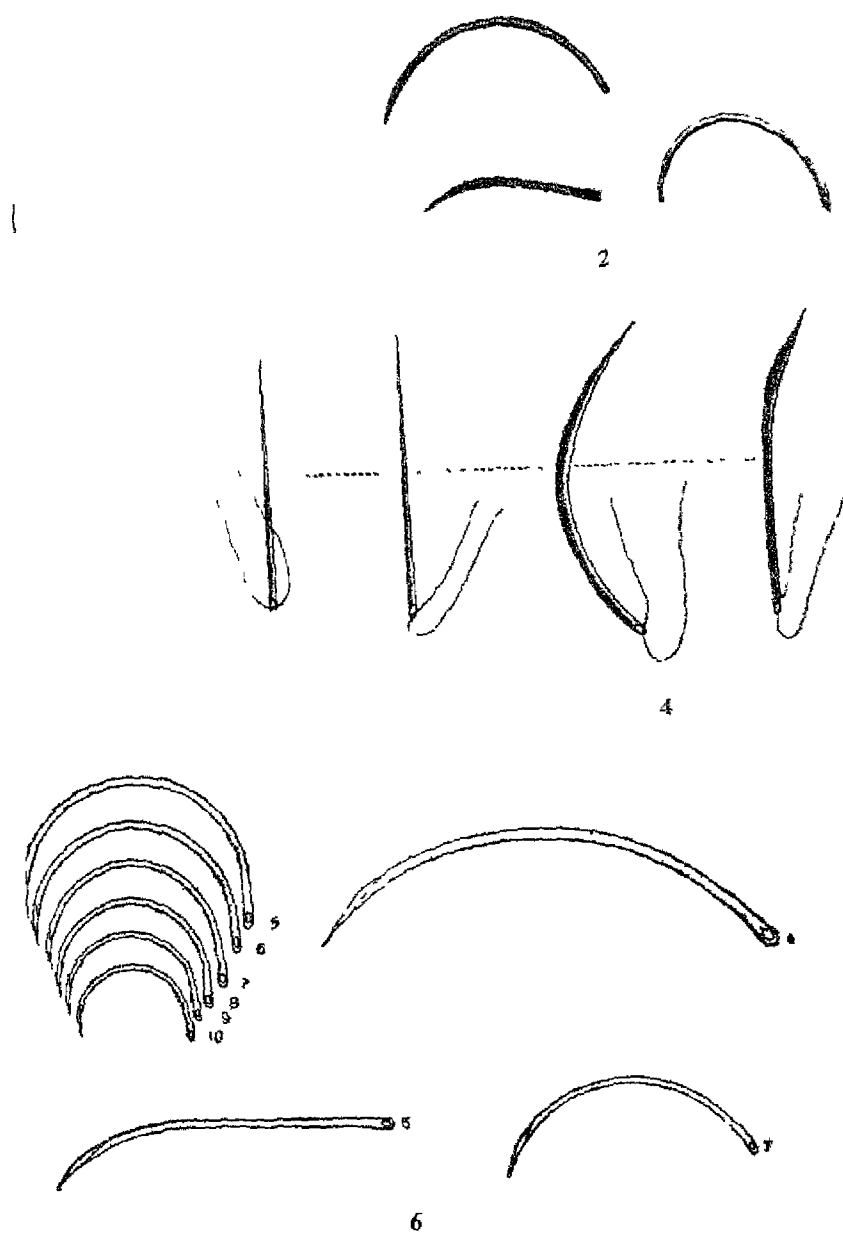
PLATE LXV.

SUCĪ OR NEEDLES

FIGURE.	PAGE.
1.—Sucī or Needles, straight	213
2.—The same, Half-curved and Full-curved	213
3.—The same After Wise	213
4.—The same After Thakore Sahib.	213
5.—Javamukhī needle	215
6.—Suture needles (modern) Hagerdon's. B B Fig 59, 60, 61 and 62	215

# The Surgical Instruments of the Hindus.

xv.





## PLATE LXVI.

## KUSĀPATRA ŚĀSTRA

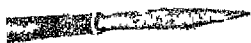
FIGURE.	PAGE
1.—Kusāpatra Knife	247
2.—The same	247
3.—The same After Wise	247
4.—The same After Thakore Sahib	247
5.—Paget's Knife A II Fig 181	247

## ĀTĪMUKHA ŚĀSTRA

6.—Ātīmukha Knife	249
7.—The same After Wise	249
8.—The same After Thakore Sahib.	249

# The Surgical Instruments of the Hindus.

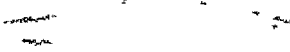
PLATE



1



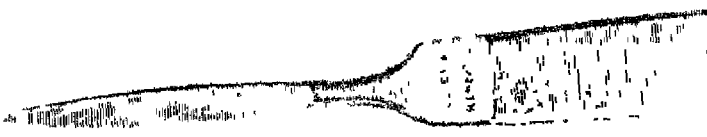
2



3



4



5

6

6



7



8

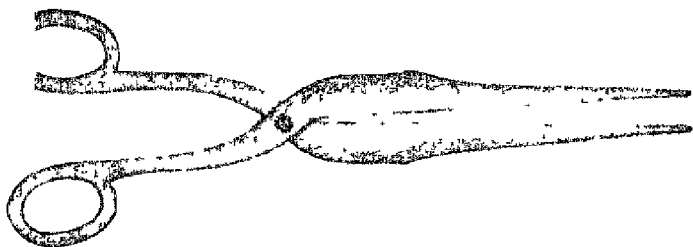
## PLATE LXVII.

## ŚARĀRĪMUKHA ŚASTRA OR SCISSORS.

FIGURE.	PAGE.
1 —Śarāṛīmukha Śastra or Scissors	... 219
2 —The same After Wise	... 249
3.—The same. After Thakore Sahib	... 249
4.—Shears, found in Pompen. Mitne, Pl. X. Fig 6	... 219
5 —Scissors (modern) A II Fig. 696	... 249

# The Surgical Instruments of the Hindus.

Plate I XVII.



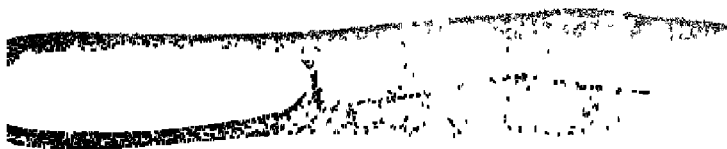
1



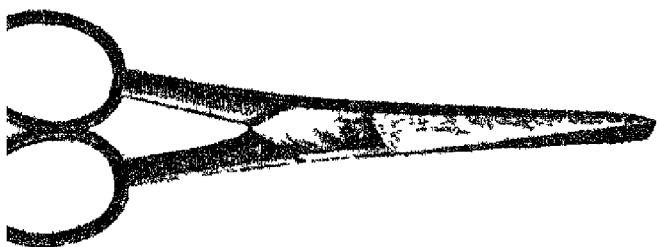
2



3



4



5

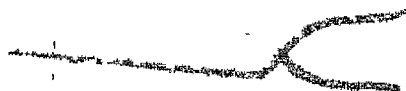
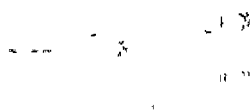
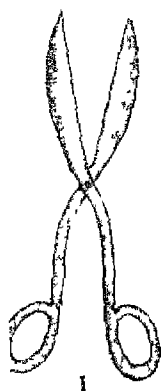
# PLATE LXVIII

## ANTARMUKHA ŚASTRA OR SCISSORS.

FIGURE	PAGE
1 —Antarmukha Śastra (Saśrula)	250
2 —The same After Wise . . . . .	250
3 —The same After Thakore Sahib	250
4 —Ardhacandīnana (Vagbhata) or Half-moon Scissors . . . . .	251
5 —Scissors as used by the Greeks Adams Vol. I. Pl. III. Fig 8	251

# The Surgical Instruments of the Hindus.

Plate LXVIII.



8



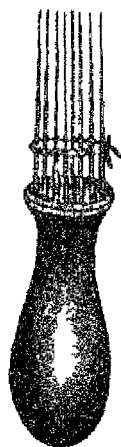
PLATE LXIX

TRIKURCCA ŚASTRA OR SCARIFICATOR.

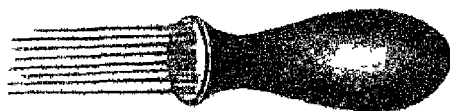
FIGURE	PAGE
1 —Trikūrccakra Śastra	252
2.—The same After Wise	251
3 —The same After Thakote Sahib	251
4.—Kūrcca	252
5 —Khaja	253



2



4



5



# THE SURGICAL INSTRUMENTS OF THE HINDUS

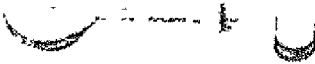
## PLATE LXX.

### KUTHĀRIKĀ ŚĀSTRA OR AXE

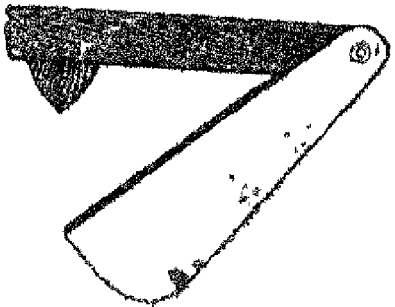
FIGURE	PAGE
1.—Kuthāra or Axe	245
2 —The same After Wise . . . . .	255
3.—The same After Thakore Sahib.	255
4 —Improved Veterinary Fleam White. P 342 .	257
5 —Gum Lancet (Modern) A. II. Fig. 3690	257

ie Surgical Instruments of the Hindus.

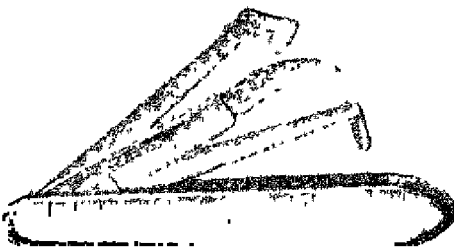
e LXX.



2



1



5

# THE SURGICAL INSTRUMENTS OF THE HINDUS.

## PLATE LXXI

### VRĪHMUKHA ŚASTRA OR TROCAR

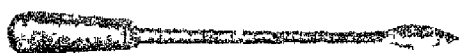
FIGURE	PAGE
1.—Vrīhmukha Śastra or Trocar	257
2.—The same	257
3.—The same. After Wise	257
4.—The same After Thakore Sahib	257
5.—Paracentesis abdominis Trocar (modern) A. S. Fig. 1441	258
6.—Hydrocele Trocar (Modern) A. S. Fig. 1436	261

# The Surgical Instruments of the Hindus.

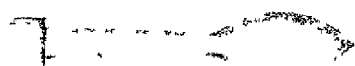
Plate I XXI.



1



2



3



4



5



6

PLATE LXXII

ĀRĀ ŚASTRA OR AWL.

FIGURE	PAGE.
1—Ārā or Awl (Dallāṇa)	262
2—The same (Vāgbhaṭa)	262
3.—The same. After Wise	262
4.—The same After Thakore Sahib	262
5—Kanna Vedham or Ear perforator	263
6—Juthikā or Ear perforator	263
7—Feigussou's Awl, cleft palate A H Fig 5310	263

# The Surgical Instruments of the Hindus

Plate LXXII.



1



2



3



4



5



6



# THE SURGICAL INSTRUMENTS OF THE HINDUS.

## PLATE LXXIII

### VETASPATRA ŚASTRA

FIGURE			PAGE
1	—Vetaspatra Śastra	Single edged	264
2	—The same	Double edged.,	264
3.	—The same.	After Wise	264
4	—The same	After Thakore Sahib	264

re Surgical Instruments of the Hindus.

te LXXIII.



1



2



4



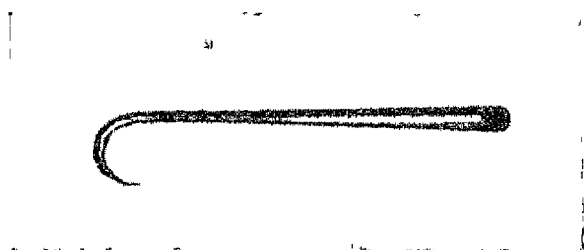
PLATE LXXIV

VADĪŚĀ ŚĀSTRA OR SHARP HOOK

FIGURES	PAGE
1.—Vadīśā or sharp hook (Rhoja)	264
2.—The same After Wise .	264
3.—The same After Thakore Sahib	264
4.—Sharp Hook of the Greeks Milne Pl. XXIV Fig. 2.	266
5.—Sharp Hook. (modern) A H 461	266

# The Surgical Instruments of the Hindus.

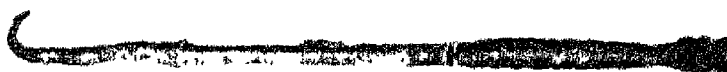
Plate LXXIV.



1



2



3



5

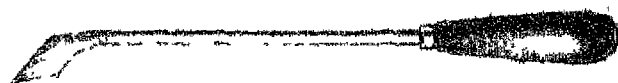
PLATE LXXV.

DANTA ŚANKU OR TOOTH-SCALER

FIGURE	PAGE
1 —Danta Śanku or Tooth-scaler (Suśruta)	267
2 —The same After Wise	267
3 —The same After Thakore Sahib	267
4 —Danta-lekhana or Tooth Scaler (Vagbhata)	267
5 —Tooth Scalers (Modern), various sizes and shapes, A. S. Fig 1364 & 1365	267

# The Surgical Instruments of the Hindus.

Plate LXXV



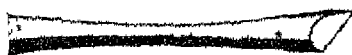
1



2



3



5

# THE SURGICAL INSTRUMENTS OF THE HINDUS.

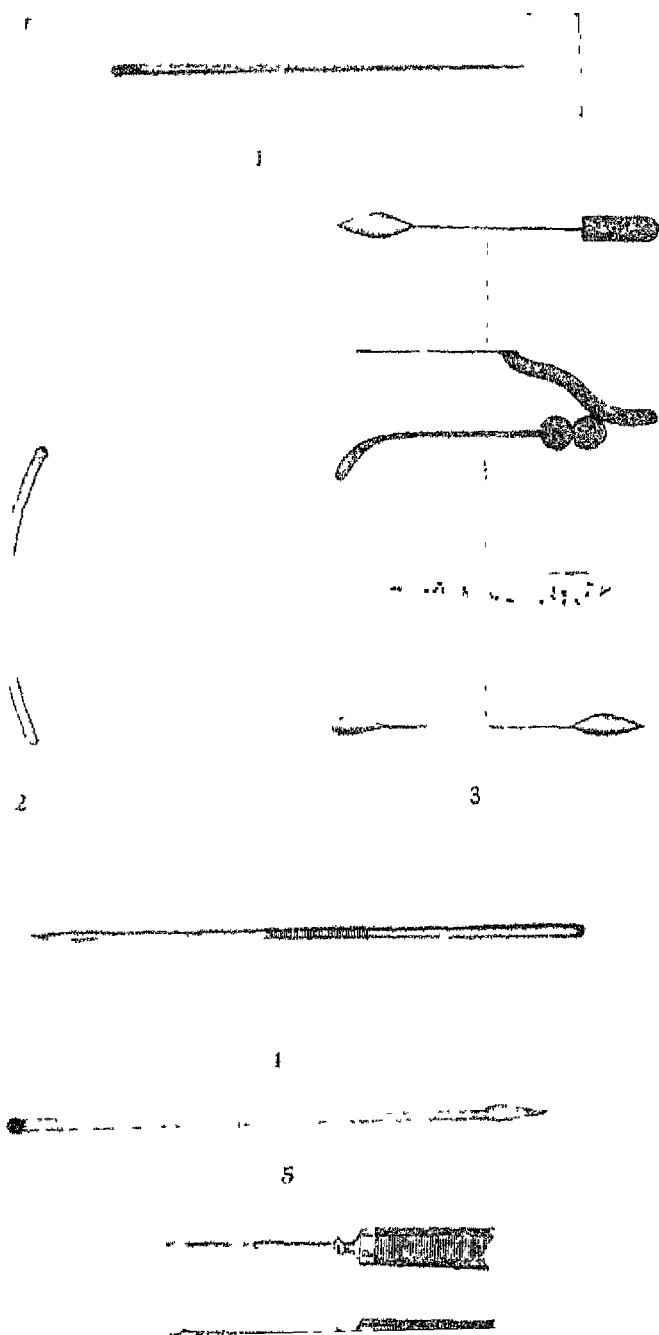
## PLATE LXXVI.

### ESANI OR SHARP PROBES.

FIGURE.	PAGE.
1.—ESANI or sharp probe ... ..	270
2.—The same. After Wise ... ..	270
3.—The same After Thakore Sahib ... ..	270
4.—Cataract probe ... ..	273
5.—The same ... ..	273
6.—Cataract Needles (modern), B. B. Fig 551 and 552	273

# he Surgical Instruments of the Hindus

late 1856



# THE SURGICAL INSTRUMENTS OF THE HINDUS

## PLATE LXXVII.

### OPERATION OF CATARACT.

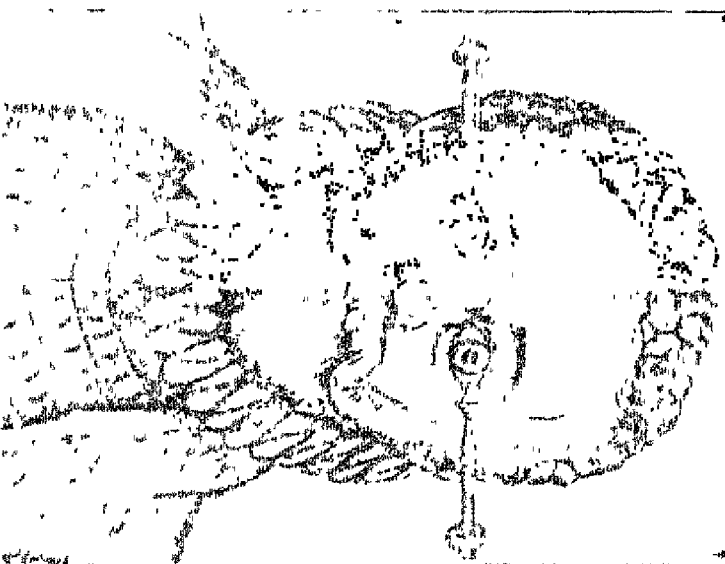
FIGURE.	PAGE.
1.—Operation of cataract as performed by Celsus, Benvenuto and Bartsch ... ..	276
2.—The same. I. M. G. 1904, p. 370	277

# The Surgical Instruments of the Hindus

CXXVII



1



2



PLATE LXXVIII.

SARPĀSYA

FIGURE	PAGE.
1 - Sarpāsyā Śastra or polypus knife . . . . .	277
2 — Polypus Knife with Scoop (Greeks, Milne, Pl VIII, Fig. 1. . . . .)	278
3 — Uvula Knife, after Albucasis. Milne, Pl IX, Fig. 4 . . . . .	279

# The Surgical Instruments of the Hindus

Plate LXXVIII.



— 16 —

PLATE LXXIX

FIGURE

1.—Jihvā Nirlekhaṇa or Tongue scraper

2.—Spoon

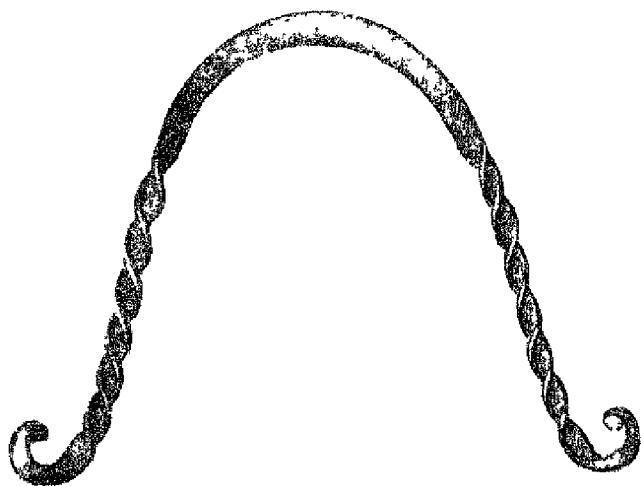
3.—Spoon (modern) A. II. Fig. 9384

4.—Spalloon

—The same (modern) A. II. Fig. 9956

# The Surgical Instruments of the Hindus.

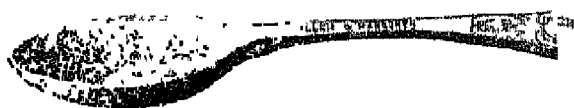
Plate LXXIX



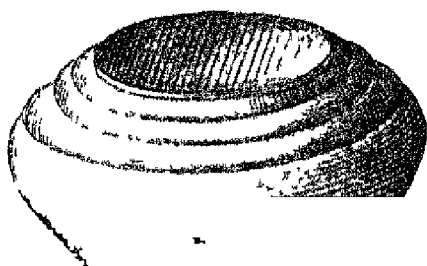
1



2



3



# THE SURGICAL INSTRUMENTS OF THE HINDUS.

## PLATE LXXX.

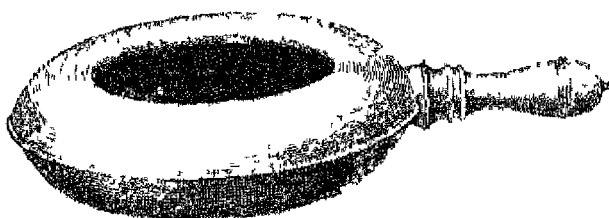
FIGURE	PAGE.
1.—Bedpan	317
2 —The same (modern) A. H. Fig. 9181	317
3 —Pus basin	317
4 —Bleeding basin (Modern) A. H. Fig. 9235	317
5.—The same. A. H. Fig. 9235	317
6 —Urinal	317
7.—The same, male. (modern) A. H. Fig. 9632	317
8 —The same, female (modern) A. H. Fig. 9638	317

# The Surgical Instruments of the Hindus

Plate LXXX



1



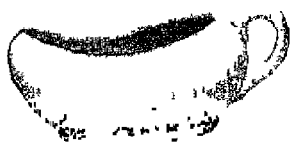
2



3



4



5



6



7



8

# THE SURGICAL INSTRUMENTS OF THE HINDUS

## PLATE LXXXI.

FIGURE	PAGE.
1.—Khala . . . . .	318
2.—Pestle and mortar (modern) A. H. Fig. 9502	318
3.—Balance or Mānṇaṇḍa . . . . .	324
4.—Pesana Śilā or Grind stone . . . . .	327
5.—Stone slab and muller . . . . .	327
6.—Sukti . . . . .	326
7.—Medicine spoon (Modern) A. H. Fig. 9379	326

# Some Surgical Instruments of the Hindus.

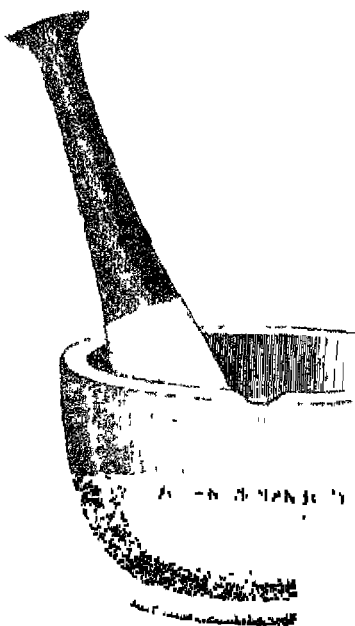
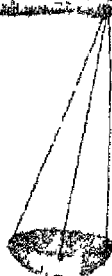
1



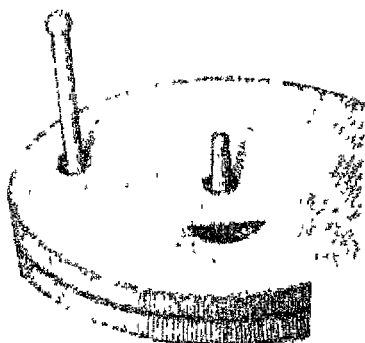
1



2



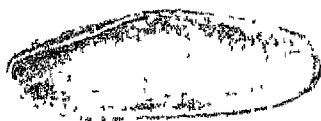
2



3



5



4



6

7

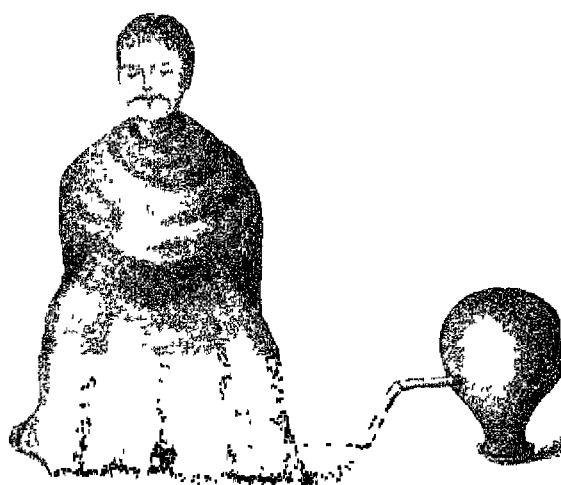


# THE SURGICAL INSTRUMENTS OF THE HINDUS

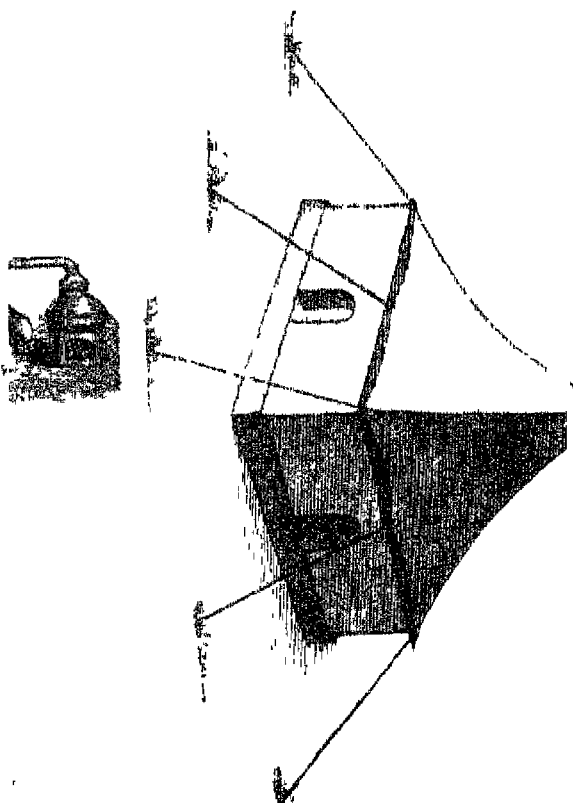
## PLATE LXXXII

FIGURE	PAGE
1.—Hot vessels ... ..	321
2.—Vapour Bath ... ..	322
3.—The same (modern). B. B. fig. 407 ..	323
4.—Cloth tent ... ..	323
5.—Drom .. ..	323

# Surgical Instruments of the Hindus.



2



4